

APPENDIX B: AMINO ACID SEQUENCES

> aaRXA00003 (1-741, translated) 247 residues

VQVRILSSEL VCSLSGAIRG VNLIDIAAPKP KKSRRRTLT PEWDAVIKHL LTRDTEPLLT
PTKHKNIRQS TKNIHARIVR LTLQAVSGL RIAEANQLQW KHIIDGDDGM LINASADIVK
GRKGKERGRY IPILRADVAE YLRTHREDDE HFIVGSPTTT ARPWDATNAD DKVPELYRQI
AEATGVKTLQ DLRSHSWRAT LHGVYADVMD PATRAAIFGH TEQVAEEYYN DRQNIESLMR
QVKRAYA

> aaRXA00008 (1-492, translated) 164 residues

MAKKKKKVDE NNSVLATNRK ARHDYHIIDT WEAGVLLGT EIKSLREGKV SLVDSFATID
NGEIWLQHLH IPQYSMSWT NHTPKRTRKL LLHRNEIDSL MGKVRDGNRT LVPLKLYLKN
GRVKLELGLA QGKQDYDKRQ DIKRRTEERE VTRELGRRIK GINA

> aaRXA00015 (1-309, translated) 103 residues

MIDMCTTPRQ EIMIREQFKE INNGRVVPHY DQLEQLAEIF STKDSIDMVN EILNRDTEFL
SNEGTFMEY IFNGGFHTDN GYQPLSYAYV ERGLAIRPPR IVL

> aaRXA00018 (1-1299, translated) 433 residues

MSALSRRPHKI ATGVAVATLT LTLCTSAAGV VHAAQQSISG PESSCAFNQO RWDDSKVKLD
DTIATAKNSL VQTGELHRNE QDLTGYLFQ QPHSSNYLAL NNAYADAVAI KDSFVRPTCD
GSKESKIAS E HAVSEVVGAV NVLARAQKAL QINSPTYEQO RRCDALRLAS RDESVDLMRI
DRTMLQLRRT LADIDQASTD IRDIRAQTTT FERDLAREQK EADAAAARAQA VDTSTPTSS
TEDRVNDILK ESRTDHSKGS YTRSTTTSAQ STEPDSATNT SYLSRRLDSL ERSQAHDILN
TQCDNLDDL ELTNNDTRDH TGSVISIADQ LTDITNEINE LRDSTFATRD SAQQAQDQVI
AQREELQRAK EARLEEQLA KEAEEGARNA AIQERDAAEA ALREAQDLS RLDDTGNATS
DDTAALVDGL LNN

> aaRXA00020 (1-780, translated) 260 residues

MTVTTAQRIA DEFQRGISIG PWDLCEVPAG DDYLEHTTKV RRRHSTAVEI HTDSLIIICAP
EGSTYSHNRT KAGLASTGTV TVPVKGLSEP VKLSLNLAD YGNSFDTVHD DLWQRELREQ
TRGQLTLNA VSGLGDDSDA IMGTPWGDGL TGEANTIKGR EHFVWMAAGC RFEDGYGRHA
LREDRHVRHQ ARAGEDSTAH HGWLLKGTVF GKELTGDAVT AAMTVFSDVV VTVDEGRIPG
MKSGQPFMSA TRLRASSAPV

> aaRXA00021 (1-1773, translated) 591 residues

MSDTTDSHDP ATSPTVDSAA SGTSDPNQQP KKKFTTIKQV NMIARTAIID CINRLGPDVV
TMSSEDIADQ VVNSINVAIA RENTRAQDAN AAVRYTPIFK LDFSHVAVLM RRLHVIINIA
PSHNSDPDS MLAIYDPNPR SEHYGIYRTS EAEIRRVARE YCPDLTSAQF RELQMALSDA
APRKVRHKQR DLIPVKNIGF NYSTKQLEPF SQEFVFLAKS AVNYPNAQN PVITHPQDGS
VWDVESWMND LSDDPEVVNL LWEIIGAIVR PYVSWNKS AW FYSEAGNNGK GTLVELMRNI
LGAEAYTSIQ LSDFSKEFHL ESLTRAQAIL VDENDVGAFL EKSANLKAIV TNDVISINRK
HKTMLSQYQF GFMVQCINGF PKVKDQSEF FRRQLFVPFE KSFTGAERKY IKDDYMSRTD
VLEYVLHRVL HMNYDNLSTP AAALAVLDEY KEFVDPVRAF WNEFSDQFVW DLLPLQFLYE
FYRKWFDRDS PSGSVLGKRS FIKKITTIAV DSGQWEYPLT AQRPGGDM AV PEPLVIDYDL
TEWQNATVPK GHVKNGLPLP LKANYRGLLR KPLTTPATPP AAPVNPTPT P

> aaRXA00022 (1-735, translated) 245 residues

MSAPTIYPGT KTSIDPITMD DARIIFFDIE SLHNIFTVAT YDSLSSHVDV FYLLDHTTSP
QITVLPMSMD YFDQTRSDAV MAIIEQNPA FAEIKGSPIT TADVALHNLG DTNANRRWQS
NVLLARLLGG ISVRGEVPEH QSHNHLAKQF AEATLVTRDF DVNYDPTSAH PFTAGFNSIN
YDTTLLSLYF AMLTSNIGST PTYFPVITAQ ELRAHNDKLF SPEFIKNMPK YFWRDRSGAG
LRAAS

> aaRXA00025 (1-1437, translated) 479 residues

MAWMNVSVIV PGSDEELFVK GLFTGEGLTW LTTNLGANYI GFPPLLTVP ILLAVGVAER
SGMLAALIRK LFGSAKKIVL PYAVGVIGVT ASIMADAAV VVPPLAAMVF KAAGRHPVAG
LLGSFAAVGA GYSTAIVPTS LDALFAGITN AVMETLPGIA TTEVNPVSNY YFNIASSIVL
GLLCGFLIDK VLEPRMWRQK IATEYAESIE PTSAADDEEI SATLTAQENR ALTISMWTTL
ATAIIVLVVV LIPGSPWRNE DGGFLPTSPL LSSVVFIVFL FFMVMGLAYG MVMGTIKNMD
DVVNMGEAI KDMIGFLVLA FILGQFVALF NWTGIGTWT VQGAAGLEAI GLTGFPALIA

FIILASCLNL LIISGSAMWT LMAAVFVPMF ALLGYEPSFI QAAFRVGD SA TQVITPLNPY
MIVILGLLR YEPDAGLGLT MSRLIPFVIP FWLAWATLLA IWFYADLPLG PGSAIFLEG

> aaRXA00027 (1-366, translated) 122 residues
VDSRSRFARS VFPDGEEDP RFTLANERTF LAWTRTSLAF LAGGIAFEAF QISGLSDTVR
TTIAVFIIAV GMIIAAGAAV RWMNVERAMR KQKPLPVPAI IPFLSIAALV ASAAVLVLII
VQ

> aaRXA00028 (1-1947, translated) 649 residues
MTLTASSLEA GKMSFSGGYI VGETMIFLVD PDEVEIRRS NSLHVLNRGS DILRRNEHHC
WVFENFNKPI DPPVRLGPRD IICPSALAWV LQQHSISRSL SHHLHADKIT AGEIAGRPTW
ILREEPTSGG QDPSRLVSL EIDQEHGVILA VETGQERLEA TEISFPDTLP NPSWDGAWEP
FHYPDSTPHT APDVAEIPGY IQSLPPQSED PRRLRVFVNE IALEGDFPDY RQGQSVRLTL
GISSSPVPLE GMTTRRRGRV RNLGEEASPG DDGMPQWPIL LTGDGWTALA YTIPIKRGDA
EIQGWFFYSA YGIVDVPTDL RVERIFAGIG TSGTNERLWQ EIDNTSSAYH SEDWWIRDV
LDVTLDGAVP PPLRRDVFTA VDPIVAGDKL WLCDVHFPVA RCWETTTGRY LGQTLXPAPL
RDRSYVLELH SDQQLGAVAA SGKSGWILTP GQAVATKAPD WTPPTRATDL PQVPSPWEIV
AVRGQGLFEL QVETSRRAL GRVNATGGVD IGELPPNGYT ISSVVQIGDE YIVGRWVEEY
RLNSKLEVIS TKELDISASG WSKSGTVAYL SEDTHICFFD QVSGAELPSL GIAEGHQGEV
MSATSSSESIV LIYRRNPNS MSIVPTSVAT YDNGTWTMP LQEAPAELS

> aaRXA00031 (1-402, translated) 134 residues
VAAGQWLAGN IGEIDHVLCS DATRTQLTWE RVQLGGATAK GSSFHNDIYE NQVSEFKHLI
TGLPDVVGTA LLIGHWPGVE ELAHYFGIRD EHPGWDQME KFP TSAIAVL EFNTPWSKLE
RNSARLTDFV IPRG

> aaRXA00036 (1-1416, translated) 472 residues
MLERTQVFVD TSYLLASFYN SWETGARAQL EIDLPEVVG LGRMIEQQLK QPVQRQMWDY
GIPDSGPHRY QRALRTCDGV QLRAGQLIEW GERRTQKAVD TRLVADLVLA GVRGQCSDIV
LVSGDADMIP GVQEAANAGL RVHLYGFGWD SMSSQLRHCC DTTTILDPRE DFAECMQLQV
LEGPLPPVVR VKPINDAEPI EDLDFTPVPG VASPFEEVSA KDEKFSRPS EPAEALSEQV
CEAQYEISKH EGQTADSGEI TESFEAAEIK VTEFFGEPAA PVAESGVEAP TPEAPTVEA
AKPTPAKPKT PKAEPQKQES PKPGTPKPKA PSPADIPKA PADTEEHSEV EAEIEDSRPK
IPSPSMMAPR RKLRSRYVPL PNEVWATAGF QTPYDVGGQY ASWWFENAA STORDQAHLL
SGGGLPPEID RPLLQFACET LHEYTLTEAQ RVALRDGFHS GIRGVLLNQR DS

> aaRXA00037 (1-873, translated) 291 residues
MANPLSKGWK YLMASFDNKI DENADPKIQI QQATEAAQKQ HQQIMQHASQ IIGQQKQLEM
KLNRLVTD RD KLQEQARQAI QLADKSANEG DSVKAQEFNN TAEVFASQLV AVEQQLEQTT
ALHQQAEEVAA KDAVAKSKES EMRLKEQMSQ IDALRAQADQ AKMQESVTKS MDSL NQFGTQ
DSSVPTLDAV REKIERRYAD ALGAQELTON TVSDRMAEIA QSGTDMRASA RLAE LRAEAL
GTSATPKGQL EAGVEDAEEL IDETSTPSAT PETASPEADA PEASADESEK K

> aaRXA00049 (1-687, translated) 229 residues
MPTPSQHKDA STAQTDNQVP TGRRAQKREQ TRARLITSAR TLMAERGVDN VGIAEITEGA
NIGTGTFYNY FPDREQLLQA VAEDAFESVG IALDQVLTKL DDPAEVFAGS LRHLVRHSLE
DRIWGGFFIQ MGAHPVLMR ILGPRARRDL LHGLETGRFT IEDLDLATTC TFGSLIAAIQ
MALSADQDSN DDKDQIFAAA MLRMVG VQAA EAREIASRPL PEISPVKPKQ

> aaRXA00052 (1-711, translated) 237 residues
VAFILFNFVK TNDETSNV SQ SESTAETVSE TNGVLS DGAE NIASQSDESK SGVEIIDSGF
GQSSNSAMAI VIAKTSGGSL AGEFVTATVN FLDESGAVVA TEDQVETLSW EDQELVLPVS
HYKEDSSRPE ITSIEAFLSV TDYSGGQ PDE TALPVLETTD ISNPYAGSYN ASFALKNDSS
DDFKNLRVGI VCYNEQTDII GGGFKFPNLV PAGGSIRMDA SVTVSEMPAS CKAYLNH

> aaRXA00054 (1-2913, translated) 971 residues
MSPFDSKLGR DTHFGFLDKT TASQQLNPS LISNEDPHTM LQAIKLELRT AQSFTFSVAF
ISSRGIALLK QALLDFKKGK RIITSRYLDF NDPTMFRELL TLENVEVLII QGDGFHSGKY
VFHHDVGITA VVGSSNLTDN ALLVNREWNL KFSASKNGDI AFQLDDAINR QIERSTPLTP
EWISEYEATR RVPERLVSQN IPLEDQSNAG TIVPNVMQEE ALDALLSLTE KGEKRGV IIS
ATGTGKTILA ALATRMLKPE RVLFVHREQ ILDKARSEFI KVLERPAVDF GKMSGSTKEL

DKPFVFGTIQ TLTKEATLSQ ISPTDFDLVI VDEVHRAGAE SYLALLNHLQ PQFLLGLTAT
 PERTDGFNIY ELDFDNVPYE IRLQALESN MLVPPHYGV TDFTLTSETT VTDTSKLSAL
 VSEERVHIL EALKTYGHPE NVRGLIFCSK TEEAEELSKL LDQSLFNGSL LKTKALSAD
 SIPYREEVVA ELESGLDYI LTVDFNEGI DIPSVNQIVM IRSTQSSIVF TQQLGRGLRK
 AAGKDHLRVI DFIGNYANNY LIPIALFGDN SRNKNISIRR LIESDIDGTI SGVSSVNFDP
 IAQERIFAAL KAAKLDSKAQ FKQDIVQLQD RLNHVPALLD FARENTVDPF ILATHSGNYW
 SLLSSVKFVD HAPSESEKYF LDFTLGELLN GKRPHHELLI QELMKQPETS TEEFRKLLQA
 QSTSSDEQTI NSVERILSQE FYTGPNRKKF GEHPILSVQN RTYSFTPEFR RALDESLEVT
 DRDEAAQNFK FHVQDIIDTG LFIARNNGFW QGNLVVGERY SRRDVCRIILN WERNNESTIY
 GYKVDSYTST CPIFVTYHKA DDVSESTRYQ DELVDPNTLH WYSRGNRKIT SNEIKPIAAN
 AVDLHVFFVK DDAEGLDFFY LGQAHSSENSK QSSMPGNKGV VQPVVTMDLQ FDTPEVQSLE
 EYLSTNLAVT E

> aaRXA00056 (1-750, translated) 250 residues
 LLNRVSRIAG ASAITLCIGL TTILSPTSTA QSLEQITPLP ESAIDLNAEI HVNTSDISAE
 QILGAQDEIT TMYDSHPYE YFDTLTDIEQ RSIIAALKRD PSSLQQRQET RLAAQSDPYK
 IYISGLEMLS CINLVDVVSC GIANQAATKA NNEAVARYPG DSLRNGKGD FRHCSWNALM
 TIRIGSNGAE RIATNHETIG DGPADENAMD LFNNAQGRQI GAGFINSKDE TSALAICALW
 TNLGRKTLK

> aaRXA00058 (1-564, translated) 188 residues
 MKFFGFYRPI ALIAGITVSA SILTSVATAA ESPTSFAQIT PAFSSSSAPE ADAEANTSEA
 TADLLYVAEN QLLIKLSNAV VEDVNGEILM KDNKGTLLEN LTAELOAQPG FSIEKVDST
 ALLTMNPDEV PDLQDWRCGV GALSGGVAGV VATGLALAAL GVATGGTGFA VLAAGGLAGY
 GTGAVANC

> aaRXA00059 (1-282, translated) 94 residues
 VLTGILLAMV STALRIRFGS GVAIAATVLW TVISITLGGD VLAETMLWL AVPSWPETAD
 TTRFLIAML LQAVLITGST IWAIREIRDS ERRG

> aaRXA00063 (1-285, translated) 95 residues
 MTDGDLADI SPRQIGLMTT RTVVEIVRLR HMIAQQLERA TIMENEYLKE IAALKKELAH
 YKQKDHQNM VIDILGKAIG TRPNPGEGLD EEDAT

> aaRXA00065 (1-273, translated) 91 residues
 MANLPQEGFS VVHGILADPR IWGPEIPYVR EEAGQVNVEA PDEAGDLARL TLPLQLILLT
 EEEFAIALNE GSDVMFERMA EQEVDLLDLK R

> aaRXA00067 (1-486, translated) 162 residues
 MVDAQRPKAG IFGSHTTEETW VWLGNELFDE SGEVIADVRS DVLYVDRERL LIESTPGTMR
 FRCRATLSGG EVYTMQNSF TVGDLTAVCG RRTYSLKRV PWRKERLITN NGVEVARLRP
 MTSGKVEFIV GTAGSEALPF VDAVFLSWAC VLVDSAVRRP KI

> aaRXA00068 (1-582, translated) 194 residues
 MTSKDLIVTS YTSWGKRFKN DGKLFINLLR STTDSADEKV LATFGEVPSK SFETTATVDE
 QQWELFSID GTATAKLPDG RVFSANAGEK TFTKSKRIEI DMDGTAMAAV NEDKNWIID
 DSEENKVAQF TGMNNGVRR IVEFEPDVEV TQEQEIFLSW VARKTLESRM LGSSWGLTLF
 LIILTPIIIF LTFS

> aaRXA00071 (1-1452, translated) 484 residues
 MSITTHVQAL TTALNAIDNH LASMXDHGVT PDQYKAIEPD LIALEHTINH HATIAAQTXA
 LAERTXXXX IGSTHLIDYL TTTFGLSKAR AHRINLAHS LYPIPKPNSG SGNNGGNGNP
 DGGPDGGDSG DDDSGDDDPD PEPDKPEDGK PDSKPRRPR ISAEKHAIIT DELARLNPT
 TPSAEEXRXQ ALSXAIWRT EDLRTWLRHQ VTTANKNNPN PITAMKRRYL SVGKPDADNM
 VRISGLVPAA TAALITANTA PLTKRGNLVD LPAAEDMRTR GQRHADALHH IMEIYNHGIV
 TPARGGTASI IISMTTDDL EINHGHDG SLLNNLYPTN TGYSNLAEI MNLIAAKYDF
 AVLLDGETGQ PLNVNRMQRS ANLTQRIALF ASELVCSAPN CDRPQLECEV HHLDPWMRGG
 LTNLVNLTHQ CFNHHPRNDD SRSGVNGKGF MDRDPVTGRV GHYSASGEGP VFNRSAADR
 SGGA

> aaRXA00077 (1-1362, translated) 454 residues

MNDENIQSSN YQPFPSFDDW KQIEVSLLDV IESSRHFSDL KDSTDRSALD AALERAKRAA
 AVDTNAIEGI FQTDGRGFTHT VATQVGAWAQ QMAMKGKHVK PAFDDTLEGF EYVLDAVTGR
 TPISQQWIRN LHAVILRSQE SHEVFTAVGV QNQAQKGEY KTQPNSPQRS DGSVHAYAPV
 EDTPAEMARF ISELESKEFL AAEKVIQAA YAHYAFVCIHP FADGNGRVAR ALASVFLYKD
 PGVPLVIYQD QRRDYIHALE AADKNNPLLL IRFFAERVTD TINSIIVDLT TPIAGKSGSA
 KLSDALRPTR VLPDLHDAAH RLQESLFTET RSRLDEEGKR NGLEFLLQRI FIGSPFNLPE
 GYNAPDPSYC LTLAFNSNSP KQIFHPLSIV IAARDGKRAS SDLVAATSIG YNFHAYGREV
 EPVVTESERE RVKIYADGIV DHFELTELAKK EQON

> aaRXA00079 (1-222, translated) 74 residues
 MGLVHTEFTP INTYGILDHV VTLPDGTVKL NPFRVIPHDT GSELIFTVRP NENFEEDCQA
 VAADLERLVA LAEK

> aaRXA00080 (1-420, translated) 140 residues
 MIVLLFINLP FAQLWAKLLL IPNHLYSGI ALFCGLGIYA TSGAVFDLLM LLGIGVVALI
 MRRYGYPLAP LMIGMVLGPL AETSLRDALL SSVGDFSILV SSPITWSLYA VLAIFIASV
 ITAIRGRRKH LTSQLETIDA

> aaRXA00082 (1-564, translated) 188 residues
 VNVTEQSGES HIDIPESHQL PGPRPVGEGT FWEGRSGLIM PAILTAFSLY LLIGVLNMDV
 GNAAPGPRF FPTILGIAGL LVAVALTIQT IKYPMHPENE SGRSWKFHSD YVSLAWAIGG
 FFAFAVLLPY LGWVLGSL LFWTMTAFGS KRPGFDVLVS LMMSSVVYLA FVDVGLGLNLP
 SGLLGGGF

> aaRXA00083 (1-300, translated) 100 residues
 VLALPSSIID PLWCQFAALI PPVTDTHPLR CHRPRIPDRI IFDKLIQVLV LGASYAKIAD
 TTCSATTLRT RRDEWITAGI FEQLEQICLE FYDRIVGLDL

> aaRXA00087 (1-528, translated) 176 residues
 MIGGIIGLIL SVIIMAEKLA ILEDPGHITS CDFNAVLACG DVMRSGQANA FGIPNPLIGI
 AGFAAVAIIG AGILAGGGFR GWFWFQAQAG LTFAMMFCHW LAYQMSVIR ALCPYCMGVW
 TVSIIMFVLV TAWNVTFTSG SDSTFVNALY KYKWVIAIVW LLLIAAAAVW SFRYMF

> aaRXA00093 (1-2223, translated) 741 residues
 VTTLLAATRP TLRDAFKHPW RSLAAILLVA VPMFLVSFFL TYDQSIINAA SYPGSQVQAH
 YDGEAYQLL QENLPEDFHL ELFANGYPEV SFGDEEVNFF VVQSTNVQQA SFPADALDVL
 GATIGDVTI HGTPVEVQSI SPTNILLPEG TLFSLNFSE SETFSGTWYF PGSNFTEENR
 QALEAVGFV NEYRRGPISV DPNLIPSYIM GFLSTTILAV VALMLISPVF TISASRQTRT
 FALLASQGAT PRHIRWAVLT YGLFAGLVGA SIGLVLGQIG IYGWWKYTYP EFSLTTPWL
 LVGFWALAI ASTIAAFLPA VFVSRSSIIN GIYGGISDKI IRWSRMLIG PIVLIAAAVI
 ALFIGDGEWG GVVKQLCFLA AVIALPASVP AVLWALGRLP GLTFKLATRD MLRRSMHSIP
 AIGALAAVIM LGTFMQTTGL ATQASDREAT ASVYPEAVFL RGDTQIPGLM GQKIDVYGD
 HGFGIYELDV DFYSANYVPA LTSFFGGPVI ATPKILDMFG VHEQADIYAP STYNSGLQY
 AIYPGDETYM LDAAVLPPL YSHVLLSPET FEEIGGQTEF LGTIVLPQEL DDQTVQAINR
 SRDAHFSDH HNSSLASSAA LTAVAIIVVS LVIVLANRKL QQHALLAIGA TPGTIYKVN
 LNAALLALVG GIMGLVSGWI AALLTGTTDE IVDGAILNYG TLEHMLPWP LLVSLLVVAP
 LVCAVIGAI SPSGRHQEAS I

> aaRXA00096 (1-303, translated) 101 residues
 MTNAGDNFEI RMPSGTDDPL SDAEIQKYRE EINRLDREIL DAVKRRTKIS QTIGKTRMSS
 GGTRLVHTRE VAIINQFREE IGEEGPALAG ILLRMGRGKL G

> aaRXA00097 (1-1161, translated) 387 residues
 LFTNFFAVNN PDSPPARQKT KLRELEHREWF QEHLPGDDDD HSTAISSLAI VTGLTKAQVS
 RISIAFATLA DLPKALQK KLYHLDLSRL ITISNELAGI NPDNLGADA ILTEYLTATS
 PNQILPSPAS IGRKIKEIRD LLDDARATGS RGTQDDSSFG VTFSPDGTA IGASVDAVDG
 HIINDAVTQH AKKNDLTYGE AFSDILRNNI QVKVVLNLYT AKDLANAPVW ASGIGWLDK
 TGTFWSEKAN KEQDMDAAK ISTDKHDPPT ALRDALIGRD GTCRFPGCSV PALKTQADHR
 IPYEEGETC LGGIGCLCQH HHNMKTDRV TYLLDPFSGI IVWLMGDGTW AVSEPNGPLN
 PKNARWAQTV AQHRARHKKR WVKEDAK

> aaRXA00101 (1-408, translated) 136 residues
 MRLILNLIWL FFGGIWLALG YVFFGIIACI FIVTIPAGIA SFRMANYALW PFGRTVVRNP
 KAGGFSALSN GLWFIIAGLW LAIGHLTTAA AQAITIIGIP LAIANIRMIP VTCFPFGKEI
 YDSNRIPFGY EPMVKF

> aaRXA00108 (1-543, translated) 181 residues
 MKKFFVAGAV LSSALVMAAC SPANQSDSTS TSVETTSSSS TQVSDAVITT ENAVVRASVE
 DSDMTAVFAT LVNNSDDEIN VSGFTADVDA ASFEVHEVVD GVMQEKPGGE VIPAGESIEL
 APGGDHLIM GLANPIEAGD EVTVTLELAD GSEVKLDPIP ARTIAAGDED YDGLGTEGHE
 G

> aaRXA00110 (1-549, translated) 183 residues
 VSNKDGFTD GNSTFAPKVD SIPLSDVDT SSGEASIGTL ISNATSQMSS LFRAEVELAK
 TELAGEAKKA AIGGGAFSVA GVIALYSSFF FFFVFAALLS EWIKPWAAFL IVFLFMLVIA
 AALALFGWRK VKKMGAPKNT IQSVNQLKNL VPGQASEKLE KANKRGLYTS ASFHSPGAIT
 GDH

> aaRXA00114 (1-489, translated) 163 residues
 MKLLKFAAAG TFALALAGCT QTESLVATIE SATSAAQASG NDVEGDQTS FELSVGECFN
 DTYEEEISEV PIVDCAEPHD NEIYYLYDIE GDDFPTDITT TGYEGCLPTF EGFVGAPYET
 SIYEVYPMPT TFGSWTNGDR EVVCSVYLAT GEQMTGTAAG TAQ

> aaRXA00117 (1-591, translated) 197 residues
 MTSAQPITSV DAQTLKSWID KHEGLTVIDV RTAHEFSNLH IKGSYNVPLT TLAHSEEIS
 SRVGEHVVLV CQSGIRAGQA QQKLAPLGIS TVAVLEGGIN SFAKADGDVV RGTQVWDIER
 QVRFAAGSLV LAGLAGGKFL SPKVRTLGI IGAGLTFSGV SNTCAMGKAL SALPWNKTKP
 VPTETETLSK LPSPKEN

> aaRXA00118 (1-255, translated) 85 residues
 MQLNPDEITP VLNRLKRAQG QLTGVIRMLD EGEDCKAVVT QLAAVTKALD RAGFAIIATG
 LEQCLTNPDG DMDKKELEKL FLSLA

> aaRXA00119 (1-759, translated) 253 residues
 MLEFPADVIP ENIKHIAQTK FQTEATSVED IRRAINLLSD QAERAGASFN PGFILAQVGS
 TIVEVYGGAP VAWLDAVELL ISPDVEWGV HGSRKLDINV SGELSGVISA GDKLGELLGD
 DWTINIVHGE YKIQIEDARP STAFLADATE LINQANSEIV PFHVRMLSNS KIVMSGFSDY
 SLAGDAITSA GKLAELARPF AHWKENVIPT IEIAMDYEPS PVADLWQGDS SETPEPFDDF
 ERLLEEMLI PEI

> aaRXA00120 (1-654, translated) 218 residues
 VESLYFDSAD LRCYTEKIEG LKFRRLRIR TYGDGVLTPE STVSVEIKQR VNKVTQKRRL
 DLPFIYALAL DGSTGAAVGE QVDVEKLEI SPENQHALIH EMASFAKNYR LRPIATTKYH
 REAFVGADAE ESSRVTDHVG VSGRDRDFLL QODLEDRPTV AQGLAVVEIK CDERVPFWLT
 DMTAQLEMSV IRMSKYCETI EAFHNRPASA FGAVDPIF

> aaRXA00121 (1-711, translated) 237 residues
 MLSDLSSIFD FQDLSGTFSV VDLITLVLS FVLTSIVGVV YQKTHRHISY SQSFVQTLVL
 VGMVIAIIML VVGSNIARAF ALVGALSVIR FRNAVKETRD VGFLFLAMAI GMTCTGRFYV
 LAIAATIVVC GVLFIYRFD WFKADIQRQV IKVQVPADGQ ADSGRSYAEE VELILAQYCT
 SFEMMSAESV RGGALTEFSY TAQMRKNVKP HELVAKMRDV NYGQKATVLT GHDQTDV

> aaRXA00122 (1-1623, translated) 541 residues
 MNRRFLGLTS AAIIVAGGVL GGVQVVPYIS SGEIQTASS TATIDVGAGN VDIFDTSVSH
 EISLQVSQES LDEMLADYQE DGSKTWVKAT ITIDGVTIEN VGIRLKGNS LSGLGRTSEE
 GGPQAPAGEVE EFTDLSEEEI AQFEEQFAAQ QETTDASETG ETAENEETRG PGGGMGGGGM
 GGMTSVDADD VSTWPLLISF DKYEDGRVYQ GMTQLALRPG TTVVNEAMAL ALTAETGQVS
 QQSSFTTFSL NDEPSTTRLL LKHPDENYAD ALGNGVLFKA DSNSSFTYQG EDQTEYDGQF
 KQINGDGNNG IQPIINLLKW LDTASDEEFA EHLSDYVDVE SFARYVATQN LLVNSDDMAG
 PGSNYLWYD YDTGLISVIS WDLNLMASGS TDAGPDDEIS MGGGGGGGMR PGGTTDTEIE
 GTATEDMPDM GNMQQRERPE GMPDMGEMPD MGDREGGGSM GGNQLKERFL ASDAFTEIYE
 QVYWELYEEM YGSGTAIELL DEIAASIPET DAVTADEIAT EVASMREWIT ARTEALALQ

E

> aaRXA00127 (1-456, translated) 152 residues
 LSPYDGPHER VLIALKEHGR ADLVAFVGAV VGASISYLAA QGEIEHDITL VPAPTRATSR
 RRRGGDPVER VCNASRLSTF PCLQISSRTP DSVGQTAQQR RLNMRLVELVR QPRGSVLIID
 DVVTTGATIS ASANVLRAAG VQVRGALTYC QA

~~> aaRXA00128 (1-1704, translated) 568 residues~~
 VSKISTKLKA LTAVLSVTTL VAGCSTLPQN TDPQVLRFS GSQSTQEIAG PTPNQDPDLL
 IRGFFSAGAY PTQQYEAAKA YLTEGTRSTW NPAASTRILD RIDLNTLPQS TNAERTIAIR
 GTQVGTLLSG GVIQPENAEF EAEITMRRED GEWRIDALPD GILLERNDLR NHYTPHDVYF
 FDPGQVLVG DRRWLFNESQ SMSTVLMALL VNGPSPAISP GVVNQLSTDA SFVGFNDGEY
 QFTGLGNLDD DARLRFAAQA VWTLAHADVA GPYTLVADGA PLLSEFPTLT TDDLAEYNPE
 AYTNTVSTLF ALQDGSLSRV SSGNVSPLOQ IWSGGDIDSA AISSSANVVA AVRHENNEAV
 LTVGSMGVT SDALRSETIT RPTFEYASSG LWAVVDGETP VRVARSAATG ELVQTEAEIV
 LPRDVTGPIS EFQLSRTGVR AAMIEGKVV VGVVTRPGPG ERRVTNITEV APSLGEAALS
 INWRPDGILL VGTSIPETPL WRVEQDGSAL SSMPSGNLSA PVVAVASSAT TVYVTDHAM
 LQLPTADNDI WREVPGLLGT RAAPVVAY

> aaRXA00134 (1-570, translated) 190 residues
 MAVHLTKIYT RTGDDGTTGL SNFERVPKDD PRLIAYADSD EANCAIGQVL ALSSPTEDMA
 TLLRTIQNEL FVDGADLAP IEENPKYPPL RVLPEYIERL EKECDKWNED VPALDSFILP
 GGTPAAALLH TARVITRRAE RAAWIAVREF PSTTSTLPAQ YLNRLSDLLF ILSRVANNNG
 DVKWVPGGKR

> aaRXA00140 (1-186, translated) 62 residues
 MSDESIEEQE KELAALKAQI DELEKKDKQN KLIIEILSKA VEKNVAEAEA KRARKYPPNP
 LW

> aaRXA00141 (1-462, translated) 154 residues
 MTTDSNSATI PTPKPIVPTI DRISLIMKEF GIDLSIADEQ GTGSQVASAN LNHGHVMFAV
 IGSVLIVRAD RATEMPVSDG NPAWHLACNQ VNCFNFAAKA VVVDRTDNIV IRAEKDVPIA
 AGLNDIQLSA MLKNAIDHVL AIQDAVANAG KEIG

> aaRXA00142 (1-477, translated) 159 residues
 VPQSPTAHDP NDIQEFNLDA VAGILQDEKL DYRIDEHDGE KVIRTGFINA AISFILLDGS
 LTMEAMWRGA PSTDAAAQVL AATNEWNLTQ FAPTIRFFEL NEGTLAINAL RHVVVSAGMS
 HNQVGSYVMS SIESAVQCFE WLEQQFPDLV TWKDEHHDH

> aaRXA00150 (1-774, translated) 258 residues
 MVFSMDHKG TQENPADMSG RLNTPISTVF HFFSSLFHDA LRSVAQWSAW KKIIVSVVIV
 AIISVTFVLD VPPISVYRDW ANNAGDAFVL VFCAFYILIT QFPIPTVLT LASGVLFQPV
 LGSVVAGST TVSAVISLLI VRGLLDGWM PRLTHPAVSR INTRLEQRGW LAITSLRMIA
 AIPFSILNYV AALTSVPVFS FAIATLIGSA PGTIVTVVLG DAVTGSGNWT AVAFTVFLAI
 LGVLGIFLDQ KMPVKPGK

> aaRXA00151 (1-597, translated) 199 residues
 MWALHARYRG RDTRRAELVK RFAEALSTLE GAGQFEVIGV EDIRAHITSP LTTCDVVMAL
 LAAGDWAIGI GVIPTVDGTV DESDEAIEQ VKKISSDALR PTAKAGTVKV RIAGTKRDNT
 QAFNISAAFT LIGQVLSKRT IEGREATALV RSGLNQNEAA QELGISKQAM SQRLQAAGWQ
 AESAGWQLAV NLIEQAGKR

> aaRXA00153 (1-426, translated) 142 residues
 VGAIWIFIGA LVLAGLELAV GEFTLLMLGG AALATAGVAL IGVPVWAEFV TFAVASAALL
 MFIRPAIRKR LLKPKVLDSS PRALVGHRAE VLEDVGATSG QVRDGSISWS ARSMDPTHFT
 AEGEIVSVID IQGTTAIVWK EA

> aaRXA00154 (1-843, translated) 281 residues
 MSFSDPYAGN IFGGHSRNKQ PEYDPVPAKP GLVVEVRGDG FVGAVTGFER TYDGFVRLE
 DRRGRDALYK LRKGAFMIDG QIVNLTRFVE KQAPRKSNSG SRRVENAQAK VAAPSRIVWE
 GIHDAAIVEK VWGHDLRVEG VVVEYLEGLD NLEERLAEFQ PGPGRRIGVL ADHLVEGSKE

TRMTKSLPAD VAVTGHPIYD IWAAVKPERL GLKAWPEVPY GEDWKTGICK RVGWSDPKEG
 WHRVYNAVNS FRDLDTLIG AVERLVDFVT NLDLSKEDVL A

> aaRXA00155 (1-783, translated) 261 residues

MEIRANVYSP LQNTAVWLGA WLYELVPTD VIDAFVDLGG PHTFGDGGLL DMLRTLKELT
 STLIDAPFHG PILTLALSGP GQVPALPAGS RAAVLASASK EGALVLGGVD KQHSWALIPT
 RGKDATEWNL VEVEGFLLPAI ATVSPGEADQ LLRQATDQAA NIELSGYAS LAPKSLKNPR
 LTVGMLSDFY DTPGLPYAVP ERSAKLFARA DRVAAIAETV QETIGDHSLD POLIFLWSHI
 RTARMAGVSY ALAEFARDYH S

> aaRXA00159 (1-1182, translated) 394 residues

MENVSSVTSD GSVADVHAER WQELLARLDA DAPDIAEGTA AKLLATIPGY ELVDAGPIRE
 SSIRNTALII RVINAGTEPK AEDLPEALRL ADERIAQNVLP LGSVLHGFRM SLGEILEHLV
 QLGPEYNIDP GRMLRWSTLM WAVNDAFSTR ATRVYRDHEV ATAIADSVRR SEWIGKAVSE
 GSELSELLWG AAMYDVPADT PLRALAATSP DHAKAETQIQ KWTQRAGVRV LASVQPSVIV
 GIVIGEPKRN VDGPGFAVGL GRAEVLKLA DSYKDASLVL KAADNLKLINE VQRAQDLQSWK
 LAIHASPRVT EILAQKYVKP LRESGEFAHE IVESLRAYVD NQMNIPAAAR SIPVHVNTLR
 YRLRRFEELT GCYLEDTSTV IEVSWVLEVF GREL

> aaRXA00161 (1-462, translated) 154 residues

MSEPGPSGVK EKKKVKASHI VFLLCIFIAA CALAWWQWSR FQSGSGTFQN LGYAFQWPLI
 GAFFVYAYRK YLQYENESIE LENMEAKMMA EQGKTPVAQS EQEDSFVQLS HRPSLVEDDS
 VKEIDESFLP SRPTMDVEEF NRLNDPHARR RRKA

> aaRXA00162 (1-354, translated) 118 residues

VSTTTPIHPE RKKRVRQALT MFSIAAWVTG VFLALVAEM IMKYIIGMDL PEWARFVPIA
 HGWVYIVFLM TTLNLGLKAR WNPTRWVTTA IAGVVPLLSF FVEHNRKKEV TQTFQLNS

> aaRXA00167 (1-261, translated) 87 residues

MYLLNPPVTE PEILTVNEIP TVVAVFDNHP MNDMPAAFDQ TYQVLFPTLG AKGIAPIGPG
 FALYTSEPTD TVSFEVGMPV SQPLEGE

> aaRXA00169 (1-2073, translated) 691 residues

MSLGNPAAML AAYNTSTQVA PQPQLGPRAG EVQLSSEQQA MIDYVLAKGD VIVDATVGSG
 KTTAIQRLCS IMGADHDVLY LTYSKLLKVD AQQRVRGAKV QNYHGIVYPH LLKAGIKCGI
 SESIREFNKN FKHSRTFPS YDLLVIDEYQ DINEDYAELL RNIKSVNPLM QIVMVGDLQ
 KVRSDTTLDP QEFAAQLCED PVFAPFTQSF RIGEAMAAGL ADAWNKPIVG ANTAQQIEYR
 SFAEAVLIQ STEPSKLLCL GSRNGQMSDA LNVVERKSPA KFNKKTTFAS IRDGDSQIAH
 PNDAAVFTTF DSSKGLERDT CVVFDYDEEF WDMRLGYPNV DPVVMRNVFL VAASRGKNKV
 VFVRSDSLQA AYEAGADWAA GLAVGVVDNN TEVAPEVDAH TPAEESKGDV GEVQSQIERM
 MGFIPVSVFK ELPELAPSEY ARPISVTEAF DFKYAENVEA CFDDLVDKRL DNGKGAIEV
 NRSDDLIDLS PTVGNFQEAFF FFKDYNVHTA LSAYPSQFAK NLKRLVKKNN SVWRNCLIVT
 AASTEQMRYV DQVRSSIPVA AEKALVSRLS TRLNADSRNQ IPLILDGEAV QSKVVRTPMS
 FAGVADAVHK GVLYELKFVS ELTHPMFLQL AMYLVMSGMK DGILWNTRTD EAWQVRVPDP
 KRFLNAVVLK VSKQDYRVGN FDLPTGGGA R

> aaRXA00170 (1-1854, translated) 618 residues

MLLAIGVASP VAQAQVEDQF ELVKEISDEQ FADDGVVYVP NRNAPTVEQ LEDFESAHP
 VVIEYHEHVN DSKDNVEELP LPKRDIVAGE MRSDVIELPE GVSKEADQV EVAEARLNEG
 ARLMAATGCE AMWPTGFSVC GRILDAYRQV GGQLSWLGPP KSNELTNPDG VGKRSEFVGG
 AIYWHPDTGA YAVTLDGLRQ WGTNLWESGP LGYPTSGPMD TNYPLTQRQT FQGGDNYYNP
 LTGGAVWGDI KQRYEELGGS NHAIGIPITN ELPSGTEYFY NFFNGTISW RNDRQTRFMY
 LATQRVWDAL GRETGRLGFP EADETPEVSG LFHVVNFAER GVIAWNGILG ARELYGDVYS
 LWLQYQNTDT PLGWPIPSLT SLNESLEQEF TRGVVLGSGD ALTWIPDDEE RSLEDLPIG
 SSGSSSSSQE MTLFSQRAQY VDCKNLPLD EQRKTENNIE KNGGPIKKEY SSRGFPTEFR
 FVVRKGHYDR YRNEGWGYLK NYCKHNFANH AMAEAVVDKA VIDYGSSPGT SYKFEKTVY
 FLDCRITYTFN KNSGCKEMHA PQWVTIIYNP HTFTGANSNR PKGVISAWCN STPPGGIEHE
 PEISQCPDHV NLYNKLRI

> aaRXA00171 (1-231, translated) 77 residues

LAAEVKRLRE RDDARDQQLG VLNEAMFSLG GDGLDRFRES GDEASFNAAL NYQAVVAPEM

FKTVYGVDPST TGEPIPT

> aaRXA00173 (1-333, translated) 111 residues
 MSTTIKAAAP YSLHAHDLEQ LAVDLTLVTT FDSNAAVDVT PTHTEAPGFT LHEGTDTPAM
 APTLVVPISS DISTAVSEIS TLVQQARTDA ASAIHEAEAE FYNQLAAVLA Q

> aaRXA00174 (1-285, translated) 95 residues
 MPNHPPISTE DRRSAMREG ITDYLANNTA NGLGGYSISD THLDNLAEKF TRTHGEAQYD
 AGFDPNDLEP ETFVRDIEMS WDERAIDRAL IHTQL

> aaRXA00175 (1-630, translated) 210 residues
 MAVCQLPQPE KTTLIKDDL LMTSTNSTA MFNDHLIPMA ELDEQALRDS VGSWAQYKHP
 LDQRKEPELV LIRRVNSSER VWVLSFTDLR ADAGLVPRST PNADPSNIRN TIFSVAVRDL
 VLDRSLPRLL NLNGQPPAGE WEEGFVYVDY DQSDTVDGYL IEHSEPVSIIE SQTTEGMHYF
 DKVPGGVAVT NNPDPGTEQGD ARRWWVSHWES

> aaRXA00176 (1-159, translated) 53 residues
 QLMYSTSSFT TVKQTIGIDL AELIQGRALG QAQGEAQGKA SAAALEQAPH NEQ

> aaRXA00179 (1-459, translated) 153 residues
 MIAIHAAAI LFLGPATVAN SQFHVRAIDA HNGNTQAAGS AKTLFKISQS YGMLSLLVPL
 LGIAIMLLDW SFYKSEGQFH AAIALSVITW ALLLFVIFPR QKKMMGALDL LEDDEQAAT
 YEIENWDKAK SQLSMFGGIW ALLWVIAVL MFI

> aaRXA00180 (1-540, translated) 180 residues
 MKNFIRVLIA FSVFLCIYTV APHIGRGP GD LAPVTAIPQR ATVLGYDRAS MFGGWLGGVR
 EGIVDEAGDT DPYSGNRLDL SSAEVDHILP LSAAWDLGAH RWSAGERISF ANDPLNLVLV
 SKAENQEKSD QLPSEWLPSD RSARCWYVER LFAVANAYEL PLPENDIRVG RKQCGFAKPW

> aaRXA00183 (1-852, translated) 284 residues
 MTESRRVKMD NVIYANFGSK QRVSTPDDRT QVINKSRHKQ FSPAGTRTVM LTEKNADSGR
 RSRGEQYRN GNVGTMTVLE GRVECTVAGS QNEPFVTTVT FPYRSSEKLR EAYAAIADTP
 NGLRLVRDGH LTSSMLDHLV GSPDESIYFD CTCPDRLVC KHAVASAYHV AEKMTANPGL
 ILDIRGQGMA GLEALIRTYH TKVETEPEDN DSWFNGRELP ALPDPKIAPA IDSDINYLH
 KALRMVSYTS LEQLRAVSDI EDMYEILVAN HPDNQQVYEE EDTD

> aaRXA00185 (1-2628, translated) 876 residues
 MRIHEIIDN FRAIEHLELR DIPDQGVIVI HGDNEQKSS ILEAIKTVLN SKHRTTSKTI
 KAIQPVDRDV PISITLEATV GTVRFRIHHR FLKSTAAELQ VIEPRPSNHR GLEAEALAE
 ILESHLDTSI LDALFMKQGE VEAGISAVGI PTLTSALNAQ NGNTEDATED TALMEAVEKE
 YLKFYTNQSGK ANTRFLQFSK QVETLRDLD EANAIEVAKLS SHVDRVKRLE IDRDQATAQL
 PKAEELLAGR KAELEEAQKV KAAATEILAQ FSRAEEQLEQ ATGAQKRRKE LRNKLELAQT
 EVEKAEAGQE NLAQEASREA EEFLALSEKF EAARAAETLA VEKVKAAARQS VAGIKNRDRK
 EHLTVMLGEL DRIGQRLYEL RSVQHSSVRV SQRDIDALQK AITEVDIQT LVEAQQGSIT
 LSASTPTDIQ LGDDTVSATD AGTTVALDRE LTVVVGDVTL VINPGKTAAE SRTDFESAEA
 ALAELLDQLD VSDLDQLRER FTAQEQRDAD IAEVLREQQR MSGGTETTTLV RAELEGLHVP
 EDLDPSISVD DAQTQLNEAE ESRELAEEAH KHANAALDGL RSRPVDKALT VFNAQLAALQ
 RNLSSAQVEL DRAVAETSDD EVDAAVQRCA EALAGVRVQK QEIEQVLAKT NPDMAQRLCD
 AAENANRSYK TAVSDATTEL VRLEGLIGVA AGAKERLDKV KSALTAAENR FESEQRRAHA
 ARRLYALMVF YRDESRKRYA APFADKLSRL AASVFGESAD FDLDELKIS SRSIGPRTVD
 LANLSGGAKE QLAILTRFAI AELVAESSAQ GAVPVFIDDA LGSTDPERLT RISTLFSDAG
 KDSQVFLVTC VPDRYNYVEV TQKHSIESLK TANALL

> aaRXA00194 (1-285, translated) 95 residues
 VAGSSHTIEP EIYRGVSTLD EPSAAWGWHG LKRNTIQLAG WISVLFMLGY NFGNHKGHVE
 TIWLLVITAL LVIGLLIHLF EPKALPGSHH HFSQQ

> aaRXA00197 (1-1011, translated) 337 residues
 VAAYLLGVVL FFLGIAVTIA LHEWGHFITA RIFGMKVRRF FIGFGPTVFA KRRGETVYGL
 KAIPVGGFCD IAGMTAQDEL DPEDLPRAMY LKPWWQRIIV LSGGVIMNLI VGFLVLYGVA
 VSSGIPNPDV DTTATVDTVQ CVPETQISAT ELSSCVGSGP AGDAGIEHGD KILAVNGQEM

ASFTAIRDAI LELPGETATL TIEREGTLFD VDLQVASVTR LASDGSEITV GAVGMSSLPP
 TDVYKYGPI EGVGATARFT GDMISATWDG LKAFFAKIPG VVASIFGAER DVESPSMVVG
 ASRIGGEFVE RSMWDMFMM LASLNFFLAL FNLVPLP

> aaRXA00199 (1-1419, translated) 473 residues
 MEDLEIFDRH LQHSDFEDQG SIGLELELNL VDKHMQPALA GHAVLSHLDD EYQSEIGNFN
 VEMNHPLSV KGDALRRLEQ GITSRLGRVR AAATSENVNV AMIGTLPTIT PEFLEDPAWM
 TQENRYRALS NAVMESRGEL VHINIADREQ IIHDFDLDLAP ESTCTSIQLH LOLAPNKFAA
 AWNASQAIAG VQAALSANSPL FFLGRRVWHE SRIPVFQQA DTRTPELVNQ GVRPRVWFGE
 RWITSVFDLF EENVRYFSPL IAESRALS GT PMMKGKSPAL HYLNLHNGTV WRWNRPIYAP
 GEERSHLRLE NRLLPAGPTP IDITADAAFY YGLVKYLAEE NRPVWSRLLF PDAEKNFQSG
 ARSGLFARMT WPTLGQVNVV NLVQEHLPQ ARIGLERLEV NKDLIDQYLG IITERAKSRQ
 NGATWQLRSL NKLEAHGSM GSDARKAGLA AMLQQYLQNG ESGQPVHTWA IGS

> aaRXA00200 (1-303, translated) 101 residues
 HYAGVTEIPE YRISPDHGGK STLSPFQDWA GGGSMGTAEA VNNAEYIPSY LRNDWGRDWG
 SIERYSLRTN SNGDAPKVD INLETIQRSG LWNPGHMKVD E

> aaRXA00207 (1-318, translated) 106 residues
 MEMKLKASQ VSTATVVAAG LIGGWLTAARE SGIRPLGTIP LAASGALAAR SWNEKKGPAV
 ATGLLATYVG AFGLSHPLAK KIGAWPAVLT VTAGAAAIAY AVSDSQ

> aaRXA00211 (1-663, translated) 221 residues
 MSFLIRVLLS DTPGSLALLA EALGIVEANI QSVDDVERFP NGTMDDLVI SIPRDVMDT
 IITAAEEVDG VEIDSIRPFS GTVDRRQIQ MLAABAHQRR DITAAMEEMV DVIPRTMTSG
 WALVIDLKG ITRIAGSLAA PEDDGTVPEN IVLKEARMLN PENDPWIPES WTLLDSSLAI
 APIKGHLAL IIGRPGGPDF LASEVEHLGQ VGDIIGAMLQ K

> aaRXA00218 (1-1140, translated) 380 residues
 MSARNPFRPT FGVSPTVLAG RDSLLQSFKL GLAEGPGSPF RALLISGSRG MGKTVLLNEF
 EDAAASQGW TLRAYPDNSM VDGLVNSAIP EALQNLDPQ SKRMLSGVAI PGATVTAIA
 DPTKKDPTPT LISRLRELAT RLQKHGSGIL ITLDELQSAN VDLHLVLATA VQDLLRDDFD
 IALVAAGLPE GIDRLQHEG TTFIRRAERI LLNPVNHEDS VEMFLDTAAE GQRHMTSEAA
 ELAAQISKGY PYSMQLTGSL AWAARSTLNS DTIQAEQVDA VRDEVVRRMG MQVHEPSLHQ
 VPDGELTILY AIAQLSKNGE MVSTGDIAHL MGVKPNALSM QRKQLLSRGL VEVPKYGFNL
 FTLPYMREHL LNSPHHRPIT

> aaRXA00220 (1-504, translated) 168 residues
 MSAFHIRAEQ SHDISAIHDV TEAAFTGIEH SDGTEQDLVD KLRAAKALSL SLVAEADGEV
 IGHIAASEVL IGGGVQGWFG IGPVSVRPDK QQQGVGIALM GSALDQLRAE GAGGIVLLGD
 PGYYRRFGFE VVPGLVYPDA PAEFFMAVCL NAPAFPQGVV EYHSAFGG

> aaRXA00222 (1-1146, translated) 382 residues
 MTPTADIWFK DTLAAHFTRD GDQTTFSYTA DYAGPPIATS LPINSEPVIT RSGAIPFFFA
 GLLPEGRRLS SLRRNIKASA DDELSLLAV GADPVGAVAI FPHGENTQPA PPTVDFDDEL
 DFSAALTESG IADPVALAGV QDKASARTIA VPVASDAILK LSPPEYPYLV ENEAACYQLL
 TKNKLRIELS KVEVLHDKHG RSGLLVHRFD RTPKGKIPVE DAGQVLGIWP ADKYLVSIED
 IAQALTKVCA SPILAMRNLA FQIAVAWLSG NGDLHAKNIS IINKGRGFEI SPIYDIPATA
 VYGDTTMALE IQGSKKDL SQ KKFLKFTSI GLPEKTAMSV ANAALLATEN AAETILASGN
 FDTMRNRDLA RVLKHRRSAW GA

> aaRXA00230 (1-720, translated) 240 residues
 LIHEQDVQKL LNYITSHFGV DPERWFHPEG YQSIALAILD SIYSTGNRYT GVLNLVNRIC
 GLRANEGSHP EADTATDLIE TFYRWGGVDE FVLKTNRRWR TSSKIHPYK AYAALAAKV
 LAGHSIESIS DVVGRFDSRE SREHSDIARE WLMITGQSSA LTWSYFLMLV GVPGVKADRM
 IVRFVTHVLE RPKEISRHEA SRLIEEVADI MCVNYIYLDH TIWRFQSGRP YLQEDSSPFE

> aaRXA00232 (1-510, translated) 170 residues
 MNDRAHQRIQ DIERSQALDR LGSYFADGYL DIDEFDTRTG AAAIARTAGE IDVLFTDLPE
 QQASTAVTPV QDDTEKELDL VLQRGKKLKQ IDSAIWAVVM VSFFLGLFVF NVPYFVWVFI
 LGGAASAGAR FLLKVDDADE KLFEELHSKE QSEREARLRI AAQRRRELEQ

> aaRXA00233 (1-417, translated) 139 residues
 MSVNEADLNA VEEQLGRAPR GVLDISYRSP DGVPGVVM TA PKLDDGTPFP TLYYLTDPRL
 TTEASRLVA LVMKWM TDRL STDEELRADY QRAHEHFLAK RNAIEDLGTD FSGGMPDRV
 KCLHVLIDYA LAEGPHHFL

> aaRXA00234 (1-540, translated) 180 residues
 MAKQKKTHKG LVPVSSRERA SESVSATRAP FRLGAVGIGA IALVVLLILF VIAIPVRNYF
 QLRSDIAQTE ASIEAKEQOI KQLESDLNRY QSEAYIREQA RLRLGVIEPG ETAFRIVDPA
 LDTDTSVTSD GNEEKPLGAW YENLWDSVTK PEALGEEEEIA PPAVEGEVPT LAPTEEATVQ

> aaRXA00236 (1-726, translated) 242 residues
 MVISFVGWAL SFMDGTAPIR QLQQIPEDVP PARGVEVPQI DTEADGRTSN HLRFWAEPIA
 QDTGVSQAQI AAYGNAELIA STAWPGCNLG WNTLAGIGQV ETRHGTYNGK MFGGSSLDEN
 GVATPPIIGV PLDGSPGF AE IPD TDGGELD GDTEYDRAVG PMQFIPETWR LMGLDANGDG
 VADPNQIDDA ALSAANLLCS NDRDLSTPEG WTAAVHSY NM SNQYIMDVRD AAASYALRQP
 AI

> aaRXA00237 (1-378, translated) 126 residues
 MKLSHRIAAM AATAGITVAA FAAPASASDF ANLSSTNKEL SPQYNWVACG ILEGGLKAAG
 VLEEGQYNRE LAEAIAAKGE GFWTTQFPQI GDWNEDQAAA LADRAQTCGL VKADTYLSEL
 SSNFSS

> aaRXA00238 (1-369, translated) 123 residues
 MKKLR FATIA AATVALTASL TPSASAQDFN QIIDNFDCGI LQTAIYTTGL AHENSTRSEL
 AANLRNSAAV GQLDFPLNIA ATGYSERIAN RALTCGIVKE DPQDFLSQLQ LLSSNLSSSF
 FTA

> aaRXA00239 (1-585, translated) 195 residues
 MRVVVVDPKH PVLVPSFLEA VLGRGEPVSI DPDFPFDI EK WGIKTSTSAS WFIIAKPQST
 LLIDAPLNPL HEAVGVMRAA VGRGEWERTQ THESLIPYLE EESQEFIEAI HGGDDEHMK S
 ELGDVLLQVL FHAETIARQG RFDIFDVAAS FVAKMQSRSP YLFDGSTGIV DTDEQQRLWA
 QGKAQEKLS EEGRR

> aaRXA00240 (1-210, translated) 70 residues
 MGIFDEAKKK ATEFLDSDSG EQKSDGLLDK AADKAKGLLG EDKADQINKV RDAVDERIGK
 NNGGEENPAN

> aaRXA00242 (1-1203, translated) 401 residues
 VNEWRTVSLV DSTALTVIIS VAVFTSAVAL LGVVKKRSRW RVLGALISSA VLTSGAWVVI
 EKLWKFPDP NPWTIYLSAG LAVFPLLSIL FRTGRTRILM ATLTVIALVN TAAVINVIYQ
 PYPTLGSFNP VPTAVMSYA DFESQTTAPT MDDRÈVGALV QVPLAGTTDD STSGFDARDA
 YAYIPPAYWD NPSLQLPVLV LMPGNPGQPD QWFSSGNADQ TADNFQATHD GISPIVISVD
 GTGSFSGNPA CVDSDAQSVM TYLSHDV PML IKQKFRVNQD QRTWTIGGLS YGGTCALQIM
 TNHPEAYGSF LDFSGQEEPT LGTRQQTVDQ LFGGDEDAFK AVNPEDLLNQ AISSGAHTYS
 GISGRFIAGS NDKSAVSALS HLDNLSNQAG MSTTFDTVAG G

> aaRXA00244 (1-636, translated) 212 residues
 MNDQLWEGDT GTLTFGSRKA LVQLLKGPMV NALQHVEVWR AITTDQDALN AVLNNLFLEL
 VLDEDAGVAF TRPANGRQEV LVGN NKTEAM PKVLR TETLS HFDTLIILIL RQELTMAPPG
 ERIVDREEI REQVLLYRVD EERDEAKLAK RFDAAFRRIV DYSLAKKTET PERFEVSPAL
 RQIFDADTVA GVRAEYEFKN KAAHDGNEEE QK

> aaRXA00245 (1-1485, translated) 495 residues
 MTVVSHALGF KRFRQESLEL SLLRSDNFPV VLAVVAQYFP QGAIKAPASE LYQLLSDDFR
 VLREEGFELP KSPSDYVSDW VKSRWFVRRP GSSQTGETVE PSEELLAVLD SVQRWDNPHR
 SISASRIESL TQALQTLALE SDPSTAKRLA ELERERDRIE RQIEAVHAGE FEVLTTVQIG
 DRVADILDLA ASIPADFARV RHELSDLNRK LRRQLLDPED SRGDVLEEIF RGVDLIGDSD
 AGRSFNSFFD VLLDRERSSL IDRWIREVLG RDEAIDLDSK LRTGLYRIFR DMEDASFENV
 GEMTGLARSL RHYVTTEEFA ESRRMIQLLR DTRSAAAKAA EAGEVTSLNH MDTPLVRIGM
 DVRSIAGLKL KNPGEERVED LPEPVEEQEL DTEVLMEQIR ASEIDFEELE EAVSLVLAEQ

SHATITEVLE HFPATQGLAS IVGLLYLAMR DGVPTGRAQI VEWESDDATH RRRITGWQFI
RGLNSEDLAE SEMDK

> aaRXA00247 (1-927, translated) 309 residues

MQTLIFIAIA GVAAQLVDGG LGMGFGVTST TILIMLAGLG PAQASAVVHT AEVGTTLVSG
LSHWKFGNVD WKVVVRLGIP GAIGAFAGAT FLSNISTEAA APITSLILAL IGMNLVWRFS
KGRIRRDYSD RPHSRGFLGG LGIVGGFVDA SGGGGWGPVT TSTLLSLGRT EPRKVVGTVN
TAEFLVSLAA TLGEVVGLWD DLVANLSAVL ALLIGGAIAA PIGAWMISRV NATVLGGFVG
TLIVTLNLPK VLVNVGLDFI PTGLIQVTVL LIGLPLTYLG FRRYRKNLLN ETISSEVVSE
PKGQKIKST

> aaRXA00248 (1-723, translated) 241 residues

MIPLITLSHG SRKKSAAAGI TALTHEAGRM LETPAVEAHL ELAEPISLDQV VATLSAEGVT
RAALVPLLF S NAYHAKIDVP EAVKDASEKY GVELLVGPHL GTGSDVASVL AQRLSADAPT
DAHVILYSVG SSHVSANESV IDLAHTIAL TGFSEVVP TGGPGAGGAG VIEVASKHKA
VHILPLFVTE GLLLDRAIDQ SANIAAATGT NPTYSEPLTT DLAPLVAARY HAALSALLAH
I

> aaRXA00250 (1-216, translated) 72 residues

ALGAALGQFD FVRNNIDLIF LLIVFISVVP GLVGMARKLA DGHKQANTEP QENPAVQTAP
VKTQEAQEAP QN

> aaRXA00252 (1-243, translated) 81 residues

VFAGGVDGVA GVWSVAGAGV DVDDAAGCRA EGGQELATQL GRDNDVEIKV CVPFGHTAGF
DGRVTRHRRG VHQRHVVEV F

> aaRXA00256 (1-771, translated) 257 residues

MFMSLKTRRI FGALAVLSI SFSAIATPAA SAQELVVSTS AVNEFGVVT DITAEQILQA
QDLIAEMKQS EDIYEFYFAL SDVEQRSIIA AVKENPYLIE NESPRMRVQS ETPDEETPK
KKPSKTYKLY MSILEMMSCI NLVDVPSCAQ ALKAANIAER EAKARYPDSV TNGKGDALRH
CAWSALMTIR IGKDAAERIG NAHETVVRGE PEEREMDLIN NALGRDIGER FIINGDETGA
LSTCVSMANI GLLHTLL

> aaRXA00257 (1-456, translated) 152 residues

MKIKKFSITA LASVLMITGC ATNHSSPLYS YLNASTSTTV EQVRLSDLYG EQWTEFALVC
PYTTKDEVKE ELGIKINTYL TDSTDDSSND IVLRDKDGSY DWIYFNRFDI VYLCNGSAEN
LKIYPIDSVL EFEHRDDYGT WKLSAITEPG NQ

> aaRXA00258 (1-672, translated) 224 residues

MRHTTSATST TSIIKRAMTI SAAVLIASAV GLTTSASSLN TLSATSPESP DQAATVSQAE
SDSELDDGMK KLATKILNRA DNAENDDTG KNLNDDDKL NTKQPQRP AE KVAQAIELSL
DTTNAEKPD KSFHHEKPVN AYVTSVSYNK SNTWTIKPS DSAVNTPTND AERISNIIQE
ARDLGLSDDE SLTQQIAFHA HAANYLVTEW VLRGYQLANP KVLP

> aaRXA00260 (1-1176, translated) 392 residues

MHSDAVLAGA SIRAKIGALA TIYGAQNLN VIHSVSFTDR RISPQGQLSK ELFREAWSAN
LLIPDPSSDV EAFWSEKNS TELAGGIFVE KMLFTVPDTG RSNRVQSF S EELRNHISLK
DMYSTQREEL LDLAYELMVG EAVRFANFRL YDQNLPLTE ANIDKLRAHL REAAASASLG
VLYLMVWRSV KDAAAHTKH TRMSKENATT HSVTKVSIFV DQLLSGTFPC SKPFHESSQV
PLSEATKIVF NLIMESPME TEPVLRNSL QEHSDWELLQ QCDEKIPDRE FLMEWLYQEQ
TWTAEQFFDA LAMVSSSEFR ICAPGCAHQV SADIATQVLE FHDRVSEHDD RKSAMLAAEA
TIIGNKIGSQ ARAGDFVLGE VITKLQNIPIG EV

> aaRXA00261 (1-429, translated) 143 residues

MYSKDLILLF LSEQDSSYEC CVGLLDGSDG RDYIEKLLKG RKLKNHFLEW EDINKADVAR
EEIYKGQLVH LVFVTALSTP GEISFVFPQG SLMSATLEED FAALVLEEER TSFRPDLSHL
WSPVGVWVAP GLEGFVERNS EAA

> aaRXA00264 (1-378, translated) 126 residues

LLVDSGDVQL EGVTVETQL AYTGINETQL RIRNIGTPA RTVLLGGEPF TEDIVMWWNF
IGRSHEEIAE YRKQWQAEAD RFGITHGYIS HHKDGLTRLP APELPNAAIK ARKNPAPTAR

PETRID

> aaRXA00267 (1-270, translated) 90 residues
VSVAVITRIA SSPSFIAIVA IIVAAIALFV GLNSRVGTKL VDQPVVFTQE QIDQLKELKS
RDQEAAAIRQ AQLWSRGSSS EAVAEAVRKL

> aaRXA00271 (1-990, translated) 330 residues
MESSRSKVL A SIFTVGALAL ASCSSDSSDS STSTDAAGGD SYRVGINQLV QHPALDAATT
GFKEAFEEAG VDVTFDEQNA NGEQGTALTI SQQFASDNLD LVLAVATPAA QATAQNITDI
PVLFTAVTDA VSAELVDSNE APGGNVTGTS DIAPIEQQLE LLQQLVPDAK SIGIVYASGE
VNSQVQVDEV TKAAEPLGLS VNTQTVTTVN EIQQAVEALG DVDVIYVPTD NMVVSIGISSL
VQVAEQKQIP VIGAESGTVE GGALATLGID YTELGRQTGE MALRILQDGE DPATMPVETA
TEFTYVINED AAERQGV EIP QEILDKAERV

> aaRXA00272 (1-372, translated) 124 residues
MPEPETSTMG SIQKSGEVLV PAYSAYKLNG ADLFLDIRHA TAAAPVITFD VNMTMGSM TL
IVPPGVYVEV QMASKNWSDF KVQTTNPLPG APRVFITGVA RASGLKVFTK HPHEPFGFWQ
KMFE

> aaRXA00273 (1-1113, translated) 371 residues
MSLKLNSRRL ASIAVAVAVG VSGVAAVGAA PATAQQVGAG TPIHVVNLD R TVVDPVTGDI
TFHFTDGT FV TLKAGVDGKD GTDGGQDGVIG KDATIVDVAT ESNGDVKLTF SDGTVVTIPA
AKDGVDEG D EDG KDGEDATVVS TATDANGNIV ITFSDGSLV VANGKDGNDG SDGQDGADGE
NGKDGANGAN ATIVDQIAND DGSITIVFSD GSEVTIPAPA KGATDELAQC LLNPKMLLLA
AIPAAGAIAN AVAPAIPRVV EDVRAQFNLP SLNPQFDQWL YNATKDIDAG LLISGATGLA
VLSVLADDFC GDIDADDNAD GDVAAEKPTG SSGLGSSEQS EKVDGDDDSV IDTETDADLE
VEEDPELVNA G

> aaRXA00274 (1-2610, translated) 870 residues
LSLNLKKN SA RSITALTVAG LGLSIVPAAS AQDVADDTN SDSTRDAICA AAPLVAGAAV
GVGLLSQQPE FQHMVSQIQS DAQRIGQDLS NQFNNSLESL NIGLNGVHG PQQNAVQGID
LTEAARTMAG WNDLAAQVGQ TAGPAIGAVA GTAGLIALVD YCWLEGF DFA GGSSSGTDGEN
GVDGQDGT SI TITEIKTDDD GNTIVVFS DG SEITITNGKD GAAITIVNTY RDDEGNTVVE
FSDGSTIVID KGEDGKDGED GKDGEDGKDL TVTDTYINDD GDTVVELSDG STIIVKKGTD
GKDGADGSDG ADGVSITVEN SYVDADGNTV VEFSDGSNVT INKGEKGDKG DAGADGEDGA
DGESITVNT SDAEGNTLV ELSDGTVITI NKGDKGDAGA DGEDGSNGAD GESITVIETR
FDADGNTVVV FSNGTEITIN KGEKGDKGDT GEDGKDGLTP YIGPDGNWWI GENNTCTAAR
GNDGKDGDTP RIGDNGNWWI GIVDTGVPAR QGDGANGADG ANTVEIINGY WYINGENTGV
KAVGENTNG ADGQDGENGT NGANTVEIIN GYWYINGENT GVKAQGP KGD KGDGTGDTGAP
GEGSGNV D IE SYPGGG QATIIILDQF EYEIPHTVIG DNGNWIYIGK DTGIPAQGGT
GTPGEDGLTP HIGDNGNWWI GDTDTGVSAS PTPVGEAVAG VTDVVFNTSD EPKSTITATIN
GEEYDYTLPP HSAVVFYATG SPMAYSLPNA SGLTVIGTEE TPGFTTIRFS DHSTVTIPHG
RDGTNGTNEL TVRMVSPRTS VRTETGGS AK RTL VFRQPLA VAATLVPAMT ASRSQVMILD
SQMMLRPVQR PVQMPKVLLT KGHRRATTMTD

> aaRXA00275 (1-459, translated) 153 residues
LDKRRPELSD DFIKAFDDFL HSFACLDKTT ITLLAQSPVR TSTGYTGTFI GIPNNEPLSE
EPTPTIYIVH DNHTGIIHSY PARMINLKSE LGSAEMIHEA IWGSPHQQL ISWYETYYTN
IYYGFNPPE PHKSLEIFAQ DFCLTPPEKP PFF

> aaRXA00276 (1-342, translated) 114 residues
MDDLSSRQDH EAYGTYNPDN GVMPDHVIVP SPYEPYDDAA PIDPFYDED LLDEIKEERA
AHAVD AQVTE TTKADADVAQ LATAIDEQNR PTKSCSLRQI ARNYS PGWIS VAQN

> aaRXA00279 (1-1386, translated) 462 residues
LDTDDSPDHW LDPLTEK DTS KRTLVSNIQ ETFGQPIFVA RKIWA FVNTS PGRMTLM TII
ISIAIFAAGY AMSVSSDTRQ SNLDDLITNA EPVSYNAHVL YTSLSVADTT ATTGFVQAGV
EGPVNRVKYH TAIDRAAVAA THTAASADSS NEHLMELVLE IQRQLPVYTG LVETARTNNR
AGNPVGVAYM SEASAMMRNE ILPMASELYN LTSRAVSDQQ RSVTG PQWFP LSGLLAALAM
LIVAQWLMR ITRRRINKGF ALATVMMMTA TLWVSAANWA TWQAGTKGFE EASGPLNSMT
TARIYAQQTR TTETLSLVRR QSIQSGSGTG TATINQIKRA LDEYETTAQS QTPEHQQLIT

AIRNAIAAWT ADHDEFTVLL ASGDYNGAVN AVLNKDEEGQ TSFDELDLAL AELIADSRSS
 MRSYIQSQLQ ATELVSVMMV ILSVSVLAL WVGIRPRLQE YL

> aaRXA00282 (1-789, translated) 263 residues
 MSRDDQTNNN GEGDDTSREQ SWDQSWQNLN KDSQYGPTSH PEDAPGGFQG NGQGNRSGNA
 QGNGQNGQG FGPGNASGYG GYGQYPQTP YQNSYQGYGA TSPQNDVALE ASNGKVDIMR
 AIRFGFKATF ANPAVWILGT VGLGLAFMIV SGLLGYSFL IDPNAGTTTS GFSVSETLLN
 VAIGIITFAI TICVMRGALL SVDGHKVRFG DFFKPINVGO TVILMVGLGI FGIILGTFTT
 FLTQNLVSFN DAAGTVEVNN SGL

> aaRXA00283 (1-1128, translated) 376 residues
 LALAFLARYD ALIMAFVAMW TVGFMTWRAR YRRGFRDRIG FALVDMLLLW WPIGFAFVAV
 TGASWLTTGE LFAQFTSTDG NAAIIAASGG GAIGPQALFD ASVRTFLISP ALLLVAVVAV
 FFAYRRRDPE PIIPLALIGS VVFFQIITYS LGSTFGLLRF FLTALPLTII LLFQIIPPRH
 RFPSLRPGAC YRDRVTGKYV PKTITGVVLV AIFGGTGITL YGMSSANWAP QEYAIQELVF
 NMGSPSQDAV HTLNFTSTEM DVADFVDSL N LGDGEVLLST TYGFAVLTA NNQKQFIIPS
 DEDFITTLNE PAEHGVKYIL ALPREGRGAT DPINLRYPDM YETGSHIATM EIEFINQGGQ
 QPNWRLYRVL TTPEQS

> aaRXA00285 (1-513, translated) 171 residues
 GTELGALLR VLNREEMMDR FARELGFFVD KQLEEVERIN CHHNYTVQEE HYGETIWLTR
 KGAVLADEGT PALIPGSMGT ASYVSGSGKN AEALRSAPHG AGRRMYRNQA KKRFTSTADLD
 SRMAGIVYRP GKEWIDEIPD AYKDIDQVMA DAADLVITIRH KLRQIVNVKG T

> aaRXA00286 (1-564, translated) 188 residues
 VLKIPRLLLR RVLPVLITLA LLCGLVLAWF IYPAKAEPKK DDVVLVLAGS SDGRHEYGA
 LVEEGYASNY VVSNPSGSKD KVGYAHCAGK SRPKNAESFC MDPYPVITSG EARTFNELAK
 KEGWESVLVV TSRTHTQVRV TMFDQCYTGD STVLNVNSLG RTGLHNAVLH EIGGFIKFWI
 TAPCADTN

> aaRXA00294 (1-429, translated) 143 residues
 MSISNAILRG VSGAYILQSG YGKLGLPNEA AAGIQGLAAT GIPAVADMDS DTFGKFVAYS
 ELGIGGALLA PFIPSRLAGL GLGAFSTGLL AIYFRNPAMT QDDGIRPSQD GTGLSKDLFL
 AAIAGALVFA PAKKRKKAKN KSK

> aaRXA00297 (1-912, translated) 304 residues
 MGFTVVFIVI GIGWILGRRD TLGTHAQKPL SLFVYYVATP ALLFDRVTKS DTSTIFSLNF
 VVIALSALIV GFLFFLLMRV VIKRTAAVSV IGMLAASYAN AGNLGIPLAA YILDDFTVVI
 PVILFQVAFY APITMTIMEM LTNKKSTNLV RNLLVTPLTN TMVLAAIAGI AVSLTSMSPV
 VVIAQPVEML ANASVPLALV VFGLSLSKSK ILEKGQVSRR DVFTAALFKN VLHPIVAGLL
 ALAFGMEGTA LLSAVILGAL PTAQNVITYA LRFRTAESMA RDTGVVTTLI SFPVLVAVSI
 IFGS

> aaRXA00318 (1-210, translated) 70 residues
 VSDVTVGDI LILDEAYPPA LAESWDKVV L ICVDPTESVK RVGLALDCTQ ALADKAVDMG
 LDMLIIHPL

> aaRXA00320 (1-180, translated) 60 residues
 MAKEDLKWFY DLATGKVFQG KVSGETRGM PYDTEEEAHH AISIAAARTK AAEIWDDKED

> aaRXA00321 (1-1815, translated) 605 residues
 MGQHLEVETK FSVSESTQIP QLEAIAEVDH IDRTEIHQLS AVYFDTVDLR LTRAKITLRR
 RTGGNDAGWH IKFPGTIGRR EVQAPLDGEG ATETLPPREL LGHIRALIQQ RELTPIAQVD
 NERHMSYLAD EDGAVIAEFC DDHVSTVSHL PGGVRKQWRE WEFELADGTL AEEAISVLLQ
 SAQSVLTAAG AFVSNPSKL VSALDESVNH APKPPQMAQL DKNDPARGVL AAIAANASKI
 AEYDPRVRAD EYDSVHQMRV ATRELRSGLQ TFEGILGGED YLNLEKELKV LANILGRARD
 AEVVEERLSN LINTEVGDSI EEETKKELLE DLGAEYRREH ERVVRALDND RYTDLLQALE
 NLLVDPPLIT EVEEPEATEA PESAETTEST DVSEATEEAD AEAESVEEAT EQEESADAPE
 SADLDALDEE YSPGSQAPVE EPKEPKKQDA ALVLLHLDK AHVKLVKLEK KARSQWDDLS
 IPMLEREENF HNLKKAACKL RYSAEAVGKA TTVETKKLYK ACSGLQSVLG DYQDAITSRN
 ELLRRAQVAR RQGRDTFAYG ILYQHEQTLS REYLTGYSDA FKSVEKAYAK LAEDTAKRSK

KNKRK

> aaRXA00322 (1-1104, translated) 368 residues

MTLSHFSDNV TDAQDSYRQI LEESIISHLG FCALRGWTPA DLRHEFSADI DPLLFHALPE
 IAYSCSDEMY TLWVNGTRAA ETSHLPVMTL EKILTELPKL STLPDWAMLA ELHALDNQDT
 SPMTPAQAKA HHRITALLKK AESTNFEEEA EALILKAETL RQYRIESLL INSYDQDVQA
 RSSTIRASRV YLEAPWIRHQ YKLLNAIARV HSSEALLITK SGICTLFGEQ DDVAHIIDLF
 NSLNRQRAHE MKTSAGARIA QLNGETSSYR RSFMISYASQ ISRL LISAKE DAFNELAGQA
 PLAHSIAIVPV LENRSVRSKE ALKETFPNMR TMTFKSTNRR GIIDGFNAAN ESHLGGESAS
 LEDSTFMF

> aaRXA00325 (1-645, translated) 215 residues

MTSIIASNSD LSEALRTHTA QAHEEAHST FMNDLLTGKL DAQAFIKLQE QSWLFYTALE
 AAARACAEDS RAAGLLDPRL ERKETLEADL DKLHENTTWR DNVTATAATA SYVERLESIE
 AAKDFPRLVA HHYVRYLGD LSGGQVIARLV NREYGVSEEA LSFYCFEDLG KLKPYKDNRYR
 AELDALELTA EERAALLDEA SDAFRNQV FQALA

> aaRXA00326 (1-480, translated) 160 residues

MAIKLSIDLS DATFAELSAV IGYAHQLGVD ADEKLTFFEGT VLNIEFDGDL QFDDVFDADF
 EAEIELDNPR EDGPIYADDL IDEDEDYRAQ TKSQINDEVI NEIRDGISSF VDGIVNGLGQ
 GRRGGRYGDF GGPRGPRGPR NDGPFPGFPGF FPGYRGPRF

> aaRXA00334 (1-336, translated) 112 residues

MAKLLDDNVQI ETVNVSFEAG GRTNWHTHPV GQNIIVLSGL GIYEAEGEPA RLLEPGDVVF
 AAAGVRHWG AVSGAPMFHV VVNLKGIDGE TVDWEPPVDE EHYRSVSAEL QR

> aaRXA00336 (1-471, translated) 157 residues

MAKPKRSWLD GPEIPADFDD PDAPGRWPGE KLGLPQEGAG SLSSVARRIG GVCVDWGVSW
 VIAIVLSNFT DVLGDVATST LIIFVILGWL TGWIFARTPG HAVFGMGLAR VDAEERVGW
 RALVRPLTI LILPAVMVDA DGRGLHDKAT GTAVIRG

> aaRXA00337 (1-525, translated) 175 residues

DVEGGVEKHS LSTADIAARA HAHMKSHDVL GRQTTPPQPE GGVAARLGGI AWTMIHKQML
 SRDTKGLDIT VLSTIPEGVG LGENSAMDVA LALALYRENI EEAPTKARIA DICSQSAMF
 SETSVLRARH TEALRGETGH ISVVDYADGS VTQAPHPVSR SAGLSAFVAA AQTET

> aaRXA00338 (1-783, translated) 261 residues

VGITAGRPIA TRLLGGMDKW GVHVLPKDAA YLKKMLFDAG AGAIGDYREC AFEIEGTGQF
 RPVEGANPAE GDVDKLFKSL ELRIEFVAPR NLRARLTSVL REAHPYEEPA FDIVEMHSAE
 SLENATGLGR VGELPEPMRL ADFVQQVANN LPVTEWGVRA TGDPEQMVS R VAVSSGSGDS
 FLNDVIKLG VYVVTSDLRH HPVDEYLREG GPAVIDTAHW ASEFPWTSQA QEILQDKAPQ
 VEVDVISIRT DPWTMSARAV N

> aaRXA00339 (1-717, translated) 239 residues

MKLDPSLHKT LLQLATTILRT QNANSAPKTT PEQEAVDKAV AELSRNRDAA SAGQMAVDDM
 ENEILRIQSD ERKLRRRKD QGDALGAETD EERRRDLNHD VYTAKSRIAD LMSELQEAHN
 EIHALLRNRD LAQSRVKDTE RKVADARAAA EAAAAATPEG EDPVVIAHL EEKLPSEALA
 EFHAQRLENG VGAALFNRS CSGCAMVLP TGISDIRNTP KDEVPQCPEC GSYLITDIS

> aaRXA00342 (1-429, translated) 143 residues

VADAPGAVKQ GAQDYAQLLG IQSGHIVQEI GWDESDTLI SESIEDAIGE ELLDEETDEL
 CDVLLWVRE DDGDLVDGLV DSIRSLAENG RIWVLTPIG KEGALAPGVI SESAQLAGLV
 QTKAERLGNW QGSCLVQRGN KKP

> aaRXA00344 (1-579, translated) 193 residues

MSFGLGLSVL FIHLYPGRSS TAFSLTGTQI VGVSSSSLWI LVAVTVIVVS AVVIFWRPLL
 FASADPIMAQ ASGVNVRFIA VAFVAVLGLT TSQSVQIVGA LLVMALLITP GAAAVAVTAN
 PVKAVVLAVI FAEVSAVGGL LLSLAPGLPV SVFVTTISFV IYLCRLIGW LRGRGAQRDE
 DAYRRRQHDH HPH

> aaRXA00349 (1-1059, translated) 353 residues

EKILDELEQS PASYGFPVAL LGWPMGGAV AVLLGGGCQV SLIAFITAFT IIATTSFLGK
 KGLPTTFQNV VGGFIATLPA SIAYSLALQF GLEIKPSQII ASGIVVLLAG LTLVQSLQDG
 ITGAPVTASA RFFETLLFTG GIVAGVGLGI QLSEILHVML PAMESAAAPN YSSTFARIIA
 GGVTAFAAFV GCYAEWSSVI IAGLTALMGS AFYLLFVVYL GPVSAIAIAA TAVGFTGGLL
 ARRLIPPLI VAIAGITPML PGLAIYRGMV ATLNDQTLMG FTNIAVALAT ASSLAAGVVL
 GEWIARRLR PPRFNPYRAF TKANEFSTQE EAEQNQRRQR KRPKTNQRFQ NKR

> aaRXA00353 (1-693, translated) 231 residues

VGRSFTNRTF DPLPFMVVYP DGVDQHWNDL RLGLDENTRH LGIDDVGVFFV KLATHLGNTY
 GIKRIFIVGY SNGGQMVLR L MHEVPKMLSG AATIASNMPV AENTLPQVKT FKTHPVVYLA
 MAGTADTFSP YEGGDAGIGR EHRRGVGMSA FDSAAYIAAR NGLTEHRHDV IDDVVSIDTW
 DGENPVEFWT LNGIGHLVPS GKTYPEFLGP STTSVIAAEE IGKFFDGVRR R

> aaRXA00355 (1-126, translated) 42 residues

IAFGRAAHM KQQGQSGAFT VLEVAPYLLS PENLDDLIAR DV

> aaRXA00362 (1-960, translated) 320 residues

DEKTGWTAER SATLVAGNSG LGVALPPNST MFIILALPAA AASSASQVYI ALACGGAYAV
 LYRLAVVFYW TRKDKIPATP DDQRVSFGEA MKTGWRSPLI FLGILIPVIL TIGPLSEWLK
 THGVGESGVK SMSIIVWVPI LITAIALIEG RKRIANNMAH FRVQISKDLP QFATVGISLF
 SALAAANIME ELGVGPQLSN WLDSMDLPKS VMVIVCIMG IVVATPLSST ATAAAGAPA
 VAALAAVGID PTVAIVVILL CTSTEGASPP VGAPIYLSAA IADANPTKMF VPLITYFVVP
 MILLAWLVGM GFLPVIVPTG

> aaRXA00373 (1-339, translated) 113 residues

MDIQQLDAET TAWKDSLLRA AQEAGFHFEP PKLFEDFETM VEQYKQAAAS DPDIDVTDIQ
 QMWGIVVGEY LREKMGMEWV VITDDYGTDL AILATAPNGD HVYSCPIIVV GKR

> aaRXA00375 (1-501, translated) 167 residues

MFPSPATGGD DINRRPLNEP NADATTIPTA LKVVFWMLFA TAAFMIFTGL VMYTAGYTGP
 DDVDESYKAV VVNNQEFIGG INAFAGVVIA ALTSQLPKGG KNPRLLLA I MLLVLLTDLL
 SFATRAGGFA LAIIAVLLAL EALLMFRPAV NDHIDRNHMA RVMNREK

> aaRXA00380 (1-621, translated) 207 residues

VRLTKLAATI GCVTLGLAL VACSSDSTAG TDAVAVGGTF QFHSPDGKME IFYDEADRQQ
 LPDIGGDSLM EEGTQINLSD FENQVILNA WGQWCAPCRS ESDDLQIIE ELQAAGNGDT
 PGGTVLGINV RDYSRDIAQD FVTDNGLDYP SIYDPPFMTA ASLGGVPASV IPTTIVLDKQ
 HRPAAVFLRE VTSKDVLDVA LPLVDEA

> aaRXA00387 (1-813, translated) 271 residues

QNDPETWEDY ELRVNHLPLRI EGDRVYLQGH GFAPTFTVTW PNGETRQTV QWRPDDPTFF
 LSSGVVRFDP PAGMPDLYE RRQNQLAIQG LFAPTAEWEG DNNELLTSSY PAMRDPVAI
 DIYRGDNLGL TGIGQSLFSL DSSLMHSGVL QKIERVNLQI GDTVTLDDGT TVSFDGASEF
 ANYQISRDP QNWVLVTTVI SLVSLVGSIM IRRRIWVRF YPQENGTRV ETGGLARTDR
 AGWGGEYEKF HRELLGLKEE DEDEEYFDHD D

> aaRXA00390 (1-405, translated) 135 residues

MSTTREIAFL IARILLGVIL IAHGWDKFAI TGLEGVTGFF DSLGIPAAI AIAAAVVEL
 LGGILIILGV FTRIVAFAV IDMLFAALFA HVSSGIFVTN NGWELTGAIG AGALLLIAGV
 ASAWSIDGVL AKRKA

> aaRXA00392 (1-864, translated) 288 residues

MWVGAVRQI ASVFLTLRLM LPLAARNRVA RGRIPETGDV VISLTHGKR INYVHFTIES
 IARGHVKAPI VLWLDKPDFD APWPATIKRL VARGLQVRC DGFYGPHTKY WNQFREIHGT
 GVRVATVDDD MIYPEWFLQR LLFIGDLRMD AVVAYRAHRI ELRDDRLPY VKWSAADTSK
 ASFLHFATGV SGVLYPVTFI DYVVSQGDVF LENCKRADDV WLHACALRSD HPIRQVYAQP
 RHFAVPTTQ VGALVVGNTL MGGNDEQIAK VYTDEDVAKL VAASKNED

> aaRXA00394 (1-333, translated) 111 residues

VSESNTPNLQ THQAPELNPE LQKAARKNVL IYGLARLLLF VVLTLLIHS ALLISAPVPL
 VMSAMLALIV AFPLSMLVFS KLRMNATQAV SQWDAQRKAH KEWVRSELAD R

> aaRXA00395 (1-300, translated) 100 residues
 VGRLLLIILV IVAIVLLWKA FKPSTWKRNA EINQQQAPRA VKGPDDDEEF LWNIEKNRKF
 QRRADEAAQL EEEERLKRAR ERYAKPESSE EGPEKPTEDS

> aaRXA00396 (1-471, translated) 157 residues
 VTEIAENLQR LGIELPDLPA PQYSYVPFNR QGNTLYVSGQ ISRTAAGDIL AGRVGEDATL
 EEGIHAAEVA TINLLARIHQ SIGLDNVAQI LKLNWVNSS DDEIQQPQVA DGASQLEAV
 LGEAGKHART ALPTNTLPQG ALVELDAVVA VTEAAEV

> aaRXA00397 (1-540, translated) 180 residues
 NLHSSNRMLF PGPPVDFPIN AETRCIQLDA GVAVKKDGVV LGTSDMARSL PRTAAGQEAY
 EYFFKVREG IIGQLRPGVI CADVHEATLD YLSPQLPRMI DIGMLGADTD FNTIYRKNV
 GHLMGQESF ANELRPGYKH ILHGSYGAA EIPWRYNGVA IGTEDLWYIG ADKTYILSQR

> aaRXA00398 (1-681, translated) 227 residues
 YLPEPFTVED YTARVEGLEV AGGAIVSGSF QAFDQGYLKD ALAVLGPGYV GVTQIPADTS
 DQEILDLDKA GVKAVRLNLK RGGSGAGLDDL ETLARRVHDL AGWHTELYVD ARELDELEST
 LASLPAVSID HLGLHRDGLP ALLRLVENGI KVKATGFGRV ELDPTEVIQA IMAVDPTALM
 IGTDLPSTRT KRPFEDADLD LIAETVGEDH VDNVFWNNAA AFYLGQDQ

> aaRXA00399 (1-315, translated) 105 residues
 MSHNDSPNFA RRALNWLKQG YPTGVPRHDT FALFYVLERE LTEDLNELA ELLIAEGENN
 GLHDNPITRE KIGKLITHVH SQPPEDDEDID RIQKKLQAEQ FPTRN

> aaRXA00408 (1-447, translated) 149 residues
 MNPVSPKLT ARYLTRIPWL LISAIIVFVGL GVFEVSSWFYA GVIVVAVILI WQLWLIPQQV
 KRLGWLETSD ELLITKGKLW HTFTVVPYGR IQFVDVTAGP LERAFGMKQV QLHTASASSD
 STIQGLPVAE ADALRERLAI KARERMSGL

> aaRXA00409 (1-1413, translated) 471 residues
 MSSLEGFRKV HRATPFLRIW TIIIVAVLAAF AFNSGASVLS FIWGVVTGEY GFAVLPILLT
 VGGAVIVVAL AWIITGIWWK AVGFRTNEE VQLQRGVISK DLRTARFDRI QAVDLVESFI
 ARIFRLAEVR IETAGGSDSA ISIGFLRKSE AEALKRELLD ASQHSVATTP AGVPAEPGVG
 ETVVVESAGD VLVPQIPVQR TLASTALSLA TIITAIGIVI LLFVPGFVSI AVPPFFVGMVP
 AVWNLIKSW QFTATQRNDV LHSVYGLANR RKQSIPLGRI HAVKLKQPLL WRLVGWWTVT
 VPVVGYGDTT QGGTSKILPV GSKELALKVL EAVGPLNSAD IAESADPSHM SRPQYTPPVA
 ARLLTPVDRT RQGVTLIGVA GAPGAVVVEH GRFMPRMSVI DTSHIQELTL KHGPIQRILG
 LSTVVFNLVQ GPGVMAASDL SAADGKELN ILNRKLPAL ESAPLGQNSL D

> aaRXA00411 (1-675, translated) 225 residues
 MNEMILAAOW NRLGPTFQTA IIDTLLMVII TMVVAGLLGL VVGLLLYTTR AGGILKNKVI
 YTILNVLNLF VRPIPFIIIL AAIKPLTVAV MGTSIGRDAG IFVMVVAIF SVARIVEQNL
 VSIDPGVIEA ARSMGASPMR IIATVIIPEA LGPLVLGYTF LFIAIVDMA MVGYIGGGGL
 GDFAIVGYR AFDNEVMYVA VLVIVIIVQA AQLLGNWLSK KIMRR

> aaRXA00416 (1-327, translated) 109 residues
 TSHYANPLGE FGNRNAFIED LAIRSWNELA DPQQFSDALN TSPWTIPEVF IFRGSIDDPD
 AGWKYDVAED LYPNNPNVRF RGVYFNPESE DQMWQTKQVG PFVVVTHNE

> aaRXA00418 (1-1065, translated) 355 residues
 LASYLSPTAL VVAVLAIPLS ATRLYLDGIS VDQGFRTQFL TRMADDIGLS DMNYIDMPTF
 YPAGWFWLGG RLANLLGLPG WEAQFPWAIW SMAVAASVLV PVWQRITGSL PVATGIALVT
 TCIILAMNSE EPYAAIVAMG IPAMLVLASR IAKGDKFALA GGIIYLGVSF TFYTLFTGAI
 ALSAVAVCIW VAAIVQRSIK PLLWLAVLGG GSIVIALISW GPYLLASING AERSGDSATH
 YLPLEGTQFP VPFLASSVVG LLCLVGLIYL VVRFHNNNEVR AMWVGIAVFI AWMGMSMAIT
 LLGNTLLGFR LDTVLVLIFA TAGVLGIADF RLASVYQLYP TQITERTATH LTNLI

> aaRXA00422 (1-423, translated) 141 residues
 MPTNYARDNV ISLASAREQR SGKPEPKPEL TLIVRATNVQ ADGEVHRQIG LNSAMSLDEL
 HNVLNIVFGV GGEQSPWRFE DQFHQPSAPD TNLGELLPEP GDFLFYFWGL WQFNLQCVEM

YPRDNGTPRA LCIGGSGGLG D

> aaRXA00423 (1-453, translated) 151 residues
 MTYPVLSVLD NSGDHNIWH VQTYPAALPT GAWIADEQQL TDLLKDTVVF LTPGSTAPEN
 APVATIEGVR VDVVKQVAEY NKHGIRLPSL GARTVEAQYR GEPEAEAAWR TAMELVEIAG
 GWLEIEAKRR ARKALAEAFG AEVQPLPLDT E

~~> aaRXA00424 (1-471, translated) 157 residues~~
~~LQVAAGSALI GAGVAVNDYV QSPVRR AISY GALALSGATV IAMGQDPTGE RSIIAKDSAT~~
~~MVDQIRQEIG DLGVTPGPES DVDAITERGP LVTWLL LAVF VVAFFTLAYF SMRMDVAVMR~~
~~RIAKFFEKRG ASRPFTCTGM VYAAFIYAIC ELEARTK~~

> aaRXA00425 (1-225, translated) 75 residues
 MFERFKKAKA PEVHIAAERT NLPLNDFMTR LFAQELPLLD STSRSEVYRL LREYDGPTIS
 SQEEIPAEIR ELMDL

> aaRXA00428 (1-633, translated) 211 residues
 MPGLVLSTNV AHQQDPGGD DRISGINKLP VATGIDVFIP GPNYGDGSGV VGDAIGDSLH
 HGGAHKAIYA YSREELDFFD PTYRNGYFGE NLTTSGIVLE DLLINQQVRI GTTLLEVSIP
 RRPCRTFAHW LDIKGWLKTF TQRG LPSYF RVIEEGHINP GDPIEVLQAP DHDITMSMAF
 RAKMGNKDLA RRVVAANCLP ARYHEELKL I

> aaRXA00429 (1-402, translated) 134 residues
 MKTFNPTMIA GLIGVLYFVL LTLIFS IQDM ELAAEIAFGI VTIVGLIAVW DNFRDRNNST
 WKTWTGLVGG LLIAVPGICL LVGNLVLLAV DGNPSTMVNT LLSVAGIGAI FLLPIGIIMC
 LIAGFNRYYA ALKV

> aaRXA00430 (1-411, translated) 137 residues
 MSLKTQAFRE ILTGGLSAIV DLG LLSLLQL VFGLPVPVAR TISFIAGTTT AYMINRRWTF
 QAESSTSRFL AVVALYGVTF LINIGLQTLIC SALFENWGW N EAVAMV VAFV IAQGTRNGHQ
 LHRPKNHHFP SEVRYP S

> aaRXA00433 (1-525, translated) 175 residues
 MDVLKIAIIA AAMIGVPVLV VFLIVFAVHK LAKEVPRSGR RRGIGLGLLL GFVAGLIVWF
 VWLSWGGYYE NEFGQMGGPY RPWQVVACGV TMVAVTVILG LWTRWTASGP FYSALGGASG
 FSFAWAMDAI PQDETGLSAF GLVMVIVGVG AGLNVVATLT SIGATIWN NR LPSNA

> aaRXA00447 (1-300, translated) 100 residues
 MLGSLWRFAV RTAAGAV ALW VVIKLIDGIS LSFPTTPLYQ DGQHDNLLTF LAVA AIIIVL
 NATVKPVLKL LGLPLTIITL GLFSLVINAV IMLLA EYVSD

> aaRXA00451 (1-492, translated) 164 residues
 MNTEEDGLSF AVTATLVEGK WQVREFEDHF SKLST SINAV RSLRSEGP AF ALLCVDDEYF
 VMVRPTPSRV FLFLSDAPMA VDDDFAAAVM DELDADLPDI NPDDLDDIDP WPEGDFDILA
 DLGLSEEVLS VICDDMDLDP SEQLLR IAE E LGFDNDLARV VGFD

> aaRXA00455 (1-618, translated) 206 residues
 ILLALFVAVF LISNITATKG VEIGPLVTDG AFFLFPISYV LGDVLAE CYG FKSTRRAILT
 GFGITMLAAL SFYISIWLPG ASFWEGQ EAF EATLGLVPQI IVASLAGYIV GQLLNKVLV
 AIKKRTGEKS LWARLIGSTV VGEFVD TLLF CAIAAPVIGI ATAPDFIN YV VVG FVWK TLL
 EVILMPITYA VIRWVKRREG YETFDA

> aaRXA00457 (1-1080, translated) 360 residues
 MTIALEHPVL HSTAIALPAR FQASYTTRLV AVGVDKRPSD FWLETAGTPQ AGDVVIARVT
 AINNHRKRVET PESRKAILFE GVLVMLAYGH RYAADQFLAH VPEDLGPCHL VAAGGIAGTV
 TALHDRVDEP TEIEPLGLLT NARGTVNVRD FAFDNPLKV EAPNKRAQVI AVLGTSMNSG
 KSTTLACLVN GLAAAGQKVA AGKITGTGAG NDRMIYHDAG AHSVIDFTDF GYPTTFKLN F
 AEIRALSVNM INV LADSGAD TVIVEIADGI YQGETSRLLR DQVFQEAVDH VVFSAVDALG
 AKAGVQELQA AGLHVAAASG VMTASPLATA EAAAVLEV PV VPTFDLTNPE IVTAVLTDHA

> aaRXA00462 (1-1380, translated) 460 residues

MEAIAILFVI GAILVVAVIV LGIFFLTSRT WIKVAAADEA LIVSAKKKGE SQVIVHGKAV
VMPITQTHQK ISLRSRQVNM QVTAQSDDNV TLNVEAVALV KIGSEAEFIR RAAQRFASSD
KEIVRFTQDQ LEGVLRGVVA QQTVTSMLRE RKKFSEQIAE TVIPELEKQG LILDSFQIRG
ITDDVGYIKS LGAPEIQAKK QAAEIAETEA ARAIAKSRIA NQEADLVEQT QLDANKAAAD
AQVGEARAQA MQAERLADEK ARLEVLRQQA ENKQIELEAE VNKVADAERY RRKQVEEADT
FEQTRRAQAQ VEIAEAEATA AKVRAMAEAE AVRLKGQAEA DAIKAKAEAY RENQEALLAQ
QAMEILPELM SNFASGYANI GSMTVLSGGE GSENSVGSRF AGEQALGLKS IIESVKQTTG
IDLAEI IQGR AAGHAQGSQA GAAIAEALSR DETVEDRSEK

> aaRXA00463 (1-822, translated) 274 residues
MQTTTGETSI SNETSFNASR ETSLTALGFL DYLDDEQRRA LLGEGLDIST LTWANQVTAL
RVLESLEFNEH AYELVSAVIQ HVAQEPGDNP HHFLKFSPEP STENSWELTL DGPTVGLKVT
FDPDQGITFK DAHLGLSPA E VVSVTEALDT SYSESQIKKA AEQLVGSINP TQQAALQGS
LRGAQLTEEQ KTLFLKMTSN WIDLANGDSG SEQQEEIADT FSDTYIIWNE QKDGSFAFFQM
KGPELDFS YK ESVPENAELS ARGVPNIQTS FQSP

> aaRXA00468 (1-819, translated) 273 residues
VKVVDAAQVVM GPHTAMSGAA VGLAVAQILP AEWGGVTTAT EAFIYAGLAA GAALLPDLDS
PQATVSRSGF PITQVISRFT ENICQTFVNV TRGRKDKHCN NGHRTLHTTV WSAAATGAGA
TALIGAYGKP AVIGLLFFFL GLAIRGLMPE WSKNADWLLV TGASAALAVG VWNYPAPSS
GIVLGSATV GSLTHLAGDM ATKAGIPAPA PVIPLKGKRW WNLKLPKFLS IRANGPADKF
LLFVFSVAVI IQIGLVSSGN MSTIMNLLS PAL

> aaRXA00469 (1-1176, translated) 392 residues
MSTFQEPHHN QGFIPFAQPG YEAPTPHAT GTFQQMWQTR PARIPAKQGG HAKVAGVCEG
IGVRYQIDPV LIRLFFVVTG VFGAGVAAYL IAWLCMPRYS VPVSPIEALW TPGHTKDRNH
GWWLVIAFFM FSGVLSSGAG GISGPAAAIT YLCLLAMWWA LHKKQPLPPR GLLTTEFTVS
EDATMKNEDEL YPRPQPDLS ITPVEGYAP FAQQTPEAPH WDPLAQNQYN TWDVQVPPQK
PQKKRHVWPW IVGGVVGTV VMSALAGLFI SNIDPIYFED DPGIGDVNLI PTNDELLSSY
TSGVGEMNLD FSNLTQLDQE QNVQITSGIG EVMVTLPPDV PVSLSCSAGV GTARCDVGD
AAHNADLEGP MLNLVVNSGI GDVKVEFADQ ND

> aaRXA00472 (1-861, translated) 287 residues
VSSVATKTS TLPEMNSAVS ADGVTITIDS AFTTDSVEME SLDRPSGDIQ PEMSREDGIF
VVVETTIKNE SGADMDITCA STGSTVYAEI STNQEA VYQP IRDLFLIPGN PECNHNLGSG
FDAPMTWVFQ IPKDATAERF GFTHSELGDG KLTWIALNDL SNSEPATEST MRDEAAIDPS
TPQQTVPQET VISQNTIETP VAPAPVPAY GASCPVSMLO QPSQAADGSA LVCIIYAGTPN
PIWVYGPEPL GVGATATPGA CEGYEAGGQD ASGNIMMCSG GQWVYGP

> aaRXA00473 (1-765, translated) 255 residues
LWGDGTPVSL PDLGSLRAE RIDALSRMS TMGAAPKFE PSVEESAEQK QDSLAEKQDI
VAVPSAFSDL FPGDGLPRRA VTQLVEQPLV VVDFLAHITA QGGHAAVIGW KDLAYAGVID
SGGVCEINIA IPNPGTEPLN VAAVLCEGLD VVVYKGPEIS LSPTRARPLL GKLRQGTAAL
VMVGTKVSSP ALSVDAEITD YVGIGAGSGR IRGVEMQVRA VSKTHGVRSG KVLISRPQDA
ALLEPEQPTT LRAVP

> aaRXA00474 (1-1578, translated) 526 residues
MALWFDPWPV QAVHLEDEAP AHNKPVAIAA HYRIQVCGVA ARKRGVRRGM KVRQAQAVCP
ELEVVDADAD RDARMFEGIV ASLGEVASSV EVLRPGLVAV DAGAAARYYG SEDIAAQM LI
DAALRQGIDV FAGVADEITT AVIAARANGG TVVKREASRS FLQQQPLGVL AAEEALGCEA
EVVRALADLG MRTLGELAE L PVEAVATRF NAGLRCHNIA RARHDRKVAP PITHADWEVS
HVPEEPILRV DAASFVARNL ASRLHQLLSK GGVVCQLLV TADFSTGDTV SRIWRTGEPL
TEQATADRVR WQLDGWLTAR GVHSDDPNEH DIGITALWLIP LECVPPDMAS GGLWDTGRSQ
QHVARQVIER VQSSLGVDAV LQVPVAGGRG VEERIHFPY GEKRD AIRNP AGSWPGKIPG
PLPARLG GGI NHPASQVTMI DTEGQRIYVT AEALLSSSPY ALSWGPARYL ITGWAGPWPV
DDRWEKNGT KYARLQVVGR AVSEERQLNA WLLMWKDNKW RIEATY

> aaRXA00475 (1-660, translated) 220 residues
VTQGYGVCMI VQPTSHSKHR ARLKTLAIVG ASALTLAGCG TSNSTNDAS SVTQTM SATA
DGAQLSNEAS TGPTALGEAD VAMKTLRPDA PAQLMVT DVR IGSHSGFDRV VFDLTGTGTP
GWFIDYTSNP TQQGSNTIN FTGDTALNVN IDGTVPFDFL GLEDPEIGTV DSGSIVTQV

VSAGTFEGRS QFVIGLNGKH RYSVTELQDP HRLVVDVLAQ

> aaRXA00476 (1-861, translated) 287 residues

MTLRCSDEVNV EPLPGTAKTG SGFVLEHAG SWSRDVLDGG TFDPELTDQL KRHLKASGMG
LQLIRKPGRE GRNVEKHNLF LVFAEASIE HLVVDAPADV LDLDLSGPGK NNAQRMDDPM
LLICTHSHKRD VCCAIGRPL AAAVEPQFGP LHVWEASHTK GHRFAPSMML MPWNYSYGLL
DEAETVQLFQ GALDNKFLFP GNRGRGTLDA RGQVAEIAVA EAFGEAVAPA SLQVEFEDDS
VLVTHPDGRT WVVELERIEV DGVVSSCGDQ PKTGKAWVAR QVTELG

> aaRXA00481 (1-585, translated) 195 residues

MLNMQEPDKI HPAEPTLRNI YDVKTSDPKS ELVDRSGMSE EDIAQIGRLM KSLASLRDVE
RSIGEASARY MELSAPDMRA LHYLIVAGNA GEVVTGMLG AHLKLSPASV TKTLNRLEKG
GHIVRNHVPV DRRAFALMVT DATRGEAMRT LGKHQARRFD AAKRLTPQER EVVIRFLQDM
AQELSLNNAP WLNTE

> aaRXA00485 (1-2043, translated) 681 residues

LPQGPGEIAV TTAPGAPEVG EHSVIRLSQN TEDTEVLVVG VVEPAAQETL GGAPFVVASP
DALMEWNSSG VRGEFRVATS DPASLEAASF SDATVVVASA EGHVDKLADS YLGQRDRYFL
LLAAAFVAVAA AVAFLVVFSA YSVLTGERVR EFGLIRSVGA STPQILGSVI FEAGILGVVA
AGFGAPAGLM AARLLADNAA RFGIRVPIDV IDLPSSTMWL IAGVGVMMSV IAALPAVFSV
CRKSAVESLS TPAISRTSPW FGALWLLLAG IVGAGGMWAY EATSDYRGMR SVALSIAGSG
ALVCALLIAT AVLVPWLLHV FSRIVGGTVP TLQLGLAFAA KQKRSAAALI AVILAGSALS
SAVLHGQAH I GTHLVAVAKG MGGTDMMVTA LDGEIPAGML EEISSIDGVK TAIAPATTAV
ELEDSGNFSV LMLAEDGAS VMRAGDTGAP AGGLVLGRNS PDQDAYPAGQ AANIIVADTP
TQAEIFHSDN YFSMIDPALA TGPSTTRNV ILLDGDNSQA PDNATAQAVR KTISLFDGRY
SITEGFSARQ NTFELVSRIT TMSTLLAIVA LAIAAVGLIN TVALTISERA RDRYLLRTIG
LTSTGQILVM AIEMIALSLP AAIVGAVSGG FLGRFVASSA TNTAATAPLQ VDILGGTVLA
MVAGSVLCAL IVLANKRRRV V

> aaRXA00486 (1-702, translated) 234 residues

HAIMAAVDHA RAAVLDSLSE VSGTLKVTSF QSLFTLAPK AIARLTEKYP HLQVEISQLE
VTAALEELRA RRVDVALGEE YPVEVPLVEA SIHREVLFE PMLLVTPASG PYSGLTLPEL
RDIPIAIDPP DLPAGEWVHR LCRRAGFEPR VTFETSDPML QAHLVRSGLA VTFSPDLLTP
MLESVHIQPL PGNPRTLYT AVREGRQGHP AIKAFRRALA HVAKESYLEA RLVE

> aaRXA00490 (1-903, translated) 301 residues

MNKQSAAVLM VMGSALSQF GAAIGTQLFP LNPWAVTSL RLFIAGLIMC LVIRPRLRSW
TKKQWIAVLL LGLSLGGMNS LFYASIELIP LGTAVTIEFL GPLIFSAVLA RTLKNGLCVA
LAFLGMALLG IDLSLGETLD PLGVIFAAVA GIFWVCYILA SKKIGQLIPG TSGLAVALII
GAVAVFPLGA THMGPIFQTP TLLILALGTA LLGSLIPYSL ELSALRRPLA PIFSILLSLE
PAFAAAVGWI LLDQTPTALK WAAIILVIAA SIGVTWEPKK MLVDAPLHSL CNAKRRVHTP
S

> aaRXA00491 (1-420, translated) 140 residues

VYVVLATSAN RVEDVNFDM MPRDPFADDP NDPASFITDD DPYDHPEPLS EEERIHVSQD
LRLVMEFKKV LGPRGIEGVF FMCEDCEEFH YYDWDIMAAN MRATLAGELS PVHEPSAQP
IDAYVPWDYC IGYLDGLEAK

> aaRXA00493 (1-324, translated) 108 residues

FEGDQKVGVR ALATALGKPA YWIASNAGLD GSVVVARTAA LPNGEGFNAA TLEYGNLIND
GVIDPVKVTH SAVVNATSV RMLVTTEASV VEKPAEEAAD AHAGHHHH

> aaRXA00496 (1-402, translated) 134 residues

MTRRLHGGEQ DGQEHVKGQL KQLFDDDAFL TDLRGVDPS EGDDALAGLL LDLTKEAQEP
PATMPDWSTL LPGILDQDQD LPVESTSDTT VMQASNPATQ EFAPVSISDT PNTATNSADA
DESATVVPLA ARRE

> aaRXA00504 (1-246, translated) 82 residues

MTYGFLVNTD LTHRAIDFDL ENAAKFLGGA DDGRVAVAFQ EDGTYAALY SASAKDEGAA
ANPVASLGRN AAATGDGSFF SD

> aaRXA00505 (1-252, translated) 84 residues
DLIHMDAYRL LGEDSEDADP IGALDSLDD TDLDLAVVVA EWGGGLVEQI ADSYLLITID
RETAVQEDPE SEARIFHWEW REGR

> aaRXA00506 (1-1341, translated) 447 residues
VLDFLAANPL IALVVILAVG LAIGQIRVFG LSLGAAVLF VALVVSTANT DIVIPMIVYQ
LGLAMFVYVI GLSAGPAFFS EFAKKGWKLT IFMLLLLATL IGLAWVLIKS LGLDAAIGTG
METGALTSTP GMAAVVELIE GIDPSLASEP VIGYSLAYPG AVLGSIVVAA VGAKLLKVNH
REDARKEGMI TAPLVWKGVQ LKPGITGRVG DLPRLAGESI IATRIVDDPH THRLADPDLP
ITEGMELLIN GTEEAVDRAI KALGEERETK IEDTELIYTR LTVSSPEVAG RTVAELDTVA
HGFMIARIRQ GDSEVVPKPD TVINYSDRIR VVVAPGRVAE VRRFLGDSEK SLADVNLLPL
AIGLSLGLLL GAIPILPVG TMSLGFGGG PIIAGLILGA LKHTGPLTWQ MPFHANRTIS
TLGLALFLAG VGTSAGAGFR AALTDSS

> aaRXA00507 (1-855, translated) 285 residues
VAENLNKHLK KLSKRGPHRV LVGDMNYAGI PGKIYTPAEG DGIPGVAFGH DWMKSIKYYH
QTLRHLSAWG IAVAAPDTEN GFMPDHKGFA SDLESSIQIL GGKVLGSGNV TVNPACLGTV
GHGMGAGAAV LSAANRDLVR AVGAIYPAKT SPSAIDAAFA VKAPGLVIGS SSLGLFESGE
PAKLAANWAG DVCYRESEK NQQGFSEDTM FKLVAIGISP QTGAQETVRG LLTGFLHQL
AGEKKYKAFS EPDAEAKKV SYFGQELQEH AFPKDTSPFA FLNEK

> aaRXA00509 (1-177, translated) 59 residues
LVDVELSAAL LDPPELPELA VLELEPPEEA AAEEVAPPDE PPEAALHNGF GSVSQTCTF

> aaRXA00510 (1-531, translated) 177 residues
VEKPVEKTPE KPVEKPVEKQ ECEEKPDNDP EXMQXXEPVE CEPTPKPETE PEPKXDTTHX
XPGTPTPIPX ARXLRIXXXX XQGXGTDSD XXXXXESEC APELNDVPPE SDLIGQLIK
AIGIGIVVVG VGLLVNFLEQ CVPVIEVPV PEPEPIPEPA PQPEPTSVKP PESELDK

> aaRXA00515 (1-480, translated) 160 residues
IESYIAQDDN APTAAELQVR LDAIESGEGE AMLLPDDPTL ADPNAEESFK TEYTYDEAKD
IISGFSSDPA SDVLSQLQA ATTGTRTAEI RAEVFADRTD DYNESQTALK EDFQNCIDAI
DDARPIPLQY ILIGGAIALA VIVLGIRAWT NSRKQSKHSQ

> aaRXA00519 (1-513, translated) 171 residues
MAGGGLFETG AGGSAPKHVQ QVQEEHNLRW DSLGEFLALA ESFRHELNNN GNTKAGVLAD
ALDKATEKLL NEEKSPSRKV GEIDNRGSHF WLTKFWADEL AAQTEDADLA ATFAPVAEAL
NTGAADIDAA LLAVQGGATD LGGYSPNEE KLTNIMRPVA QFNEIVDAL K

> aaRXA00520 (1-198, translated) 66 residues
MRFSRVLPAL LITTAVSIPT ASAATLTGDT DKELCIASNT DDSAVVTFWN SIEDSVREQR
LDELDA

> aaRXA00527 (1-1764, translated) 588 residues
VIATSDVREI SSEGIVARVS VNGNIEAART TTIYTSLTVP VANLPVAVGD RVAADQVLAE
LDASALQRQL DETDANNARA AMANRNSIAQ SQAYEQSRE LLDSGLSPEI NSARSSLRAS
SQAYQDAIRS FEAKQRDVG GLDSTMVAQS DALKAAREQA DAEIERLRA DFGLLNNDRS
NLNDVIGLLD ERESLASAES ELAQARAAGD LEAVAAAEAK VAGLEQSIAS KTSTWPSQDQ
TYLQSYTALE EAERRVASTT EALEIAERIY IDSLGKVDSE LAAQRAVAE AHSAQQDAAL
GLETAQLSTQ HQLEAQSSAI DAALGLASVD NEAATRSTQ LRMDINNTTV RSPYSGIVSS
VQAAQQQPAA GALLSVADDS ELKITANVKE AEISNVTIGS RVTFTPTSTG TKEFAGRVSK
VSPIAAAASA PATGEGAAAG ATTTNTDVTF PIEISVTGDR EGLNLGGSAR VRIVHEIAPH
VLTVPLEAVY KNDDGKDAVL IISDDNKVEE VEVKTAESDD FDIIVSGAGI SEDARVLTQP
GNYRGLIGET VKLHADTVEQ AAAPFSPAAP FDPAPAVSA KQTVGQVI

> aaRXA00528 (1-1089, translated) 363 residues
MSTSTIRVAI AGVGNCATSL IQGVEYRNA DPSETVPGLM HVKFGDYHVG DIFVAAFDV
DAEKVGIDLA DATEASQNT IKIADVPQTG INVLRGPTLD GLGDHYRATI DESTAEPVDV
VQALIDAKAD VLVSYPVGS EEADKFYAQA AIDAGCAFVN ALPVFIASDP EWAKKFTDAG
IPIVGDDIKS QIGATITHRV LARLFEERG VDRMTQLNV GGNMDFKNML DRNRLESKKV
SKTQAVTSNI PDGPLSGKVE DRNVHIGPSD HVQWLDDRKW AYVRLEGTAF GGVPLNLEYK

LEVWDS PNSA GIIIDAVRAA KIALDRGIGG PIMPASSYLM KSPPEQLPDD VACERLEAFI
IEA

> aaRXA00529 (1-543, translated) 181 residues
MKLKWIAPIL PVLALAGCGN YVNVESQGKS GISHDEDGNI SVHMYICGDN AVDELILSGG
FYDGPPGTNN PALGMLKTSN PESGYVVVNI ADPAPWEVVE PINLPTEQ GK YIIANPRLVD
KGWPIPFKE KYMPSVSTSV GMLEGIDPGL VMRD MYTEST HVFGTAEDFV EAGQQWCEDY
F

> aaRXA00530 (1-1281, translated) 427 residues
MSIGFDRDLY IKMQSQHINE RREQIGGKLY LEMGGKLFDD MHASRVLPGF TPDNKIAMLT
ELKDELEILV AINAKDLERK KTRADLDISY EEDVLR LIDV FRELGF LAEH VVLTQLEDDN
YQALAFKQRL ERLGLKVAVH RVIPGYPTDA RRIVSEEGFG INEYVETTRN LVVV TAPGPG
SGKLATCLSQ IYGDHQRGIK SGYAKFETFP IWNLPLEHPV NLAYEAATAD LDDINIIDPF
HLAAYDTKAT SYNRDVEVFP LLKTMLEMLS GSSPYKSPTD MGVNMVGS AI IDDAACQEAA
RQEIVRRYFK ALVDERREEQ DDTISARIAI VMSKAGCTVE DRRVVARALD VEESTGAPGC
AIELNDGRLV TGKTSSELLGC SAAMVLNALK ELAGIDRSVD LLSPESIEPI QSLKTQHLGS
RNPSPAH

> aaRXA00535 (1-717, translated) 239 residues
MWWAGMSTAM LAYFLQTVAL GFGTLLVVQP VLVL SLMFTL PLSARFNGYR LRRTEIFWAT
LLTVAVGIMI VLGRPLPGNP HPPLDRWIPV LLVGVA VMGG MWLLAEYVLK KDKALILGLV
TGALFGYVAV MSKAAVDLFV HQGITGLILN WEGYGLILTA LGTIVQQYS FNAGELQKSL
PAMTIAEPIV AFSLGYLVLG EKQVVDWEW IAMGIALLM IVSTIALSRT STMPAGSKR

> aaRXA00540 (1-243, translated) 81 residues
VARVVVNMP KAEILDPOGQ AVHRALGRIG VSGVSDVRQG KRFELEVDDS VTEADLKKIA
ETLLANTVIE DFDVVGVEVA K

> aaRXA00546 (1-690, translated) 230 residues
PVLGGIFQWI CGIITRFLYP VVDVIPFHTL PESGLYFIVT ALALAFFWVL VIRMMVELTG
NRVWDTVLVA ASPLVAVHAF TNWDTPAIAA VIGAMLAVKR GNPLVAGVLI GAGTAFKLWP
LYLLGAYLVL AVKNKNLKP IMAAAA VIT WLNVNVPVMI AYPKAWNEFL RLNRERGAEW
TTIYQVIDRN LPINLNDPVL LNVLSFGLFG ASVCGHFDPW AQGAHSPSR

> aaRXA00547 (1-414, translated) 138 residues
VAILILGLKV QRTPRVAELA FLIVAAFLLF NKVWSPQYSL WLVP L AVLAF PQWKVLFPWM
VTDAMVWPIL MWHMLGTDNK GLPHEMLDLI VISRDAFIVV MISRCNPADA RTTCKSGDGC
ARRARIVGRA LRRKRSVE

> aaRXA00549 (1-396, translated) 132 residues
LTENGETPYE GIILGQYER PLDMASAMAT IANEGVWHRP HFVSKVETVS GEVLYEFEDG
DGERRVSEKV ALNLLKAMGP IAAYSNGNAL ADGQVSASKT GTTQLGDTGA NKDAWMLGAA
PQLATAVWVG TA

> aaRXA00550 (1-321, translated) 107 residues
MYGSNSPATI WKQTM DNALE NSPLETW DIA PALGYGNPPV PEYVWTPSPN IATNDPEGAT
EEAPVEDPNA VIDTPAVDPT APAEETGNQG VEILPGLTIP GDLLGIG

> aaRXA00552 (1-717, translated) 239 residues
FKWSEGAED FPKLSVKVRD EIVAFGAPDE LKVDENG VVG GGVHLKPQQV NELVEARGDE
VVF FDGRNAM EAQIGKFKDA VVPDVETTHD FIAEIESGKY DDLKDKPVVT YCTGGIRCEI
LSSLMINRGF KEVYQIDGGI VRYGEQFGNK GLWEGSLYVF DKRMHMEFGE DYKEVGHCIH
CDTPTNKF EH CLNEDDCREL VLMCPDCFAN VETRHC KRER CAAIAADFAE QGIDPLVTS

> aaRXA00553 (1-321, translated) 107 residues
MSIVKINAIS VPEGAGEELE KRFAARQNAV DSAPGFEGFQ LLRPVSGEDR YFVVTQWADE
DSYNAWRDAE KAKGGHGQGA HGSDKKPVAS GASLLEFEVV LGSTGAK

> aaRXA00554 (1-471, translated) 157 residues
MNTQPEHPEN DLVDEADFSN RPRIYSDDPD SLADAPDPAL EHEKNKKSSR QALIYLLQVP

LVTFSVAYVL AWW SRLQGGP ICDAGEAVWI CSRAAELWWP ITTSVIAFGG MLGSAWILYD
KYRNYLRWRP WMGVLWILIP FSMLWGTSVL TLSILGH

> aaRXA00555 (1-891, translated) 297 residues

SGGKRSEQND AVFEFAAWLA RTSDINVRGI TTFIRPWPSS SISKLGKKYH KWKYNLDSYY
RSRTIKGLKE AGVEKSQWDD DVSVFVDGPS ESTLLTHAAE EFADLILLG SDATAPKGRF
LASSTADALL HSSPVPLGLV PRGVKLSKKG VTRVNYAFTN ESDDFEQGLR SSAELATNWN
VPLRILAESE TGITSAPTSR SLDISTELSS EWRELTLAML DRARDGVLTLD HPNLSVSSET
GSGWGWSGAI DALRWKKGDL LCMGSHRTDT LSRVFGVSET MEIIRNSPVP TIIYPGL

> aaRXA00560 (1-237, translated) 79 residues

MRIDPLETRQ AVLAVKDWIE GEGDVKKPGR AALAAATRLS VRLLAQHAPG NSVEVRVPPF
VAVQCIEGPK HTRGTTPNV

> aaRXA00563 (1-2739, translated) 913 residues

FYKDLYARSA RGTAALWIVA ANLSSYSID AIINWVGSEQ TTVNGASKL VKPALVPTLL
FPFAAPRVSG SMADAGPQAE SQMRLLWSV ERLIAGLAPL GSSINVGHLR HVVIPGSPNR
GRFGGDGAYG ESKAALDAVV TRWNAEQAAW GAHTSLVHAH IGWVRGTGLM GGNDPLVKAA
EEAGVETYST QEIAEKLLSQ ATSTVREQAA SAPITVDFTG GLGESDLNLA EMARAEAAKA
ANAPVVEAPR TVAALPTPYR PVVQTTDFDA GQVTQNLDEM VVIVGAGELG PLGSARTRFD
AELNGSLSAA GVIELAWTMG LIHWDEDPKP GWYDDSDDAV AEEDIFDRYH DEVMARVGRV
KYNDMPEYGM IDNFAPELTT VYLDQDLTFN VGSREEALTY VDSEPELTFA SFDEAAGEWK
VTRKAGSAIR VPRRMAMTRF VGGQVPKDFD PAVWGIPADM VDNLDTVALW NIVCTVDAFL
SAGFTPAELL ASVHPARVSS TQGTGMGME SLRGIYVDRI LAEPRANDVL QEALPNVVAA
HVMQSYVGGY GQMIHPVAAC ATAASVEEA LDKIRIGKSD FVVAGGFDAL SVEGITGFGD
MAATADSAEM EGKGIEHRFF SRANDRRRG FIESEGGTV LLARGSLAAD LGLPVLGVIG
FAESFADGAH TSIPAPGLGA LGAARDGVES RLAVALRSVG VSADEISIIS KHDSTSTNAND
PNESDLHERI ASAIGRADGN PMYVISQKSL TGHAKGGAAG FQMIGLTQVL RSGLPVAPRA
LDCVDPVLSK HSHLVWLKRP LDLRAKAPKA GLVTSLGFGH VSALVAIVHP DAFYEAVRVA
RGAEAADVWR ASAIAREEAG LRTIVAGMHG GVLYERPVER NLGVHGDAAK EVEAAVLDS
RARLVDGVLR AEG

> aaRXA00564 (1-405, translated) 135 residues

MKYNVDVSRE SEDWLATVTN LEGVSTWATT FANLDRNGRE AIALAEDLPE GAESSLTISW
SVPTDHPPEL DTAIQIAQQR RYLVQAQQDL EPKVRSALSA LTQAALLGMT AGRVSPHNP
GSRAISLDQV SGVLN

> aaRXA00573 (1-651, translated) 217 residues

MLVRPCGEQA VIIDLLAEDA EAVQGSILDA VLALNRSLVG MQVPGIIDTI PAAQTLLVTF
DTKQITPNRF AEIVDSIALT PAAKGAEELT DTIEIPVVDY GPDLETVAQH TGLSVEEVIA
THSGTVWTA FGGFAPGFY LIPQTPLDWI PRLESPRTKI PAGSVAVAGE FSAVYPQOSP
GGWQLLGTE IPMWDVDRWQ PSLKPGDSV RFVQVKK

> aaRXA00574 (1-879, translated) 293 residues

MSFKVISTGP QAIFQDRGRF GFASAGVGT GSFDRLSAAR ANHALGNDPN ATVVEILLGG
FEVEALHTTS IVFTGTEAEV MVRTAGGQSK NATNTIIDV AAGERIRVEP ATYGMRAYFA
ARGGFVKKKT LGSASTDLIS HMGPCPIEPG DVIDVATDIA DSQWWPKLRQ LPTLWKRMPT
ETLTVIRGPR DKWFTQESLN NFFTQVFTVS NDSNRIGLRM HSSEPIQHRV EGELKSEGMV
RGSIQIPPG NPVVFGPDHP VTGGYPVIAV LTRSRCDRSA QLLPGDKVRF KLL

> aaRXA00576 (1-672, translated) 224 residues

MLTSLFITGT EPGKWFTRFR DRTHHGLET LDSDDALGLM LAGQAQLALT RLPDARIDAS
LHVVTLYQE PGVAFFPKDFE LSAEEGAVDL ADLDGEIINW SMPDSGEVDA AAVRDALQIV
AANVGVIAP RPLKVLSSK LVEHRDIKGG TETSIALVWK KDEDSEEIQD FVGIARGRTR
NSSRQQTVKL SAREKTLAKQ ARRQGEKPKT PKRPQARKRP GKRR

> aaRXA00577 (1-348, translated) 116 residues

MKPQTAAKKL GLFLPATPEE FQTGALTHQE FKNLQENPPE WLQTLRREGP HPRPVVAQKL
GITIAALKKN DMDKPLTTAE IKALLENQPE WLRTARTQLA EGRETAKKET EETED

> aaRXA00578 (1-723, translated) 241 residues

MTYLVWDGAT LVEGALESTP TVVDSYLAkd HRVVRWDLHE QRFATSVDVD PWDFLHAVRE
 AIPRQGSWFP KVEWHGDDLF AVNIRPAPTL RKATSLWLSE DPDPRTQPTI KGPDLDLVAH
 LRSRANDNGC DDALLISADG FILEAANATV VFWADPQTVI VPRGDVLPSV TLAATIPLWE
 KAGITLRYQN IRHIGFPAWC GSSLHGWTfV VSWGRGLGKI AAKAPSVKP WNEKLRPTIF
 L

> aaRxA00582 (1-519, translated) 173 residues
 MSDYIVAFES AYGSTKQYAE SLAQRLGVDA LNFEQACAEL AANPTAAIVV LSFVHGpSHp
 GAKFITDIDL SGHRVALCTV GMTLDDVVQK KDGAARSLGN KADDVTRFYl PGRlNYSELS
 TAHRttMWTI VNMLKAKPLK NDNDKMMINT FDTDVDRVDE SRLDAVEEWA RGL

> aaRxA00585 (1-318, translated) 106 residues
 VIDLSPVFNT AAGVYNdTNa IILAQQQGG PLGPEFGKAS PVGLLLIVAM LVAILVLGWA
 FHRRWSRMNR RRIFAERNGL DPFDIEGVRK AMAEAGLNEK SKKGFL

> aaRxA00586 (1-882, translated) 294 residues
 MKHVSGLRLM AIHAHPDDES SKGAATMARY AAEGNQVMV TCTGGERGDI LNPAMDKPGI
 LDNIFAVRQE EMakAMEILG TEHRWLGYED SGLPQGDPLP PLPEGCFale DSDKVTQDLV
 KILREFRPHV IITYDENGgy PHPDHLKVHE VSMLAWEKSG DAAYAPeLGA PWEPLKLYYT
 HGFIRQMEM FHDLlIEQgK PSpYTPMLER WKANEADVMA RVTTQVPCER FFDQRDDALR
 AHATQIDPAG AFFGTPVEVQ RRLWPTEEFE LAKTRVKTSI PEDDLFAGIT PDae

> aaRxA00587 (1-483, translated) 161 residues
 MSTNSNSPSN ASGASNIPNT QRPASRYNSP RPEAAAGRNI SGKIIAVIGV LLVIAIVIGV
 ANFLKNRDAQ TVSGQMGSFE RIDDDTFRFE VDVTRDDPSQ VAYCIVTAkD YSHAeVGRRE
 VLVEPSDHST VRISTLIPTR EPAVSGGVYg CSTVIPSHMN L

> aaRxA00589 (1-363, translated) 121 residues
 MTTLSRKFFV SATTALAava LVACSPNEID SELKVPTATG VSLPSKNVSA TSTATtDEDA
 PGYIDCVAAP TQQAeISLN CAMDIDRLTD ISWSEWDtDS ATGTGTRIVT AANGQETETE
 D

> aaRxA00595 (1-330, translated) 110 residues
 RNIAAWIAIA AIIIASLGAL LSMIRVWREV FWGGAMHQRG VSPQLRISPA KIAPALSLII
 LSVGMFIFAG PLIDATLTAT DGLLNTDAYQ QAVLGENAÍG VPSPSYQGGN

> aaRxA00597 (1-270, translated) 90 residues
 MTAFGIVTV GICMFAFSLl SALVLILRTK DFLTRVVLSD MVFYSMIAIY LIWVLNNPTS
 IAFEIALLAA VLGGVLPTLS MARIISKGRR

> aaRxA00598 (1-318, translated) 106 residues
 MTIPEIIVSI LVILAGLFSL GTaIALWRAP DPLTRANLLG TTVGVSIPLl IIALlIHTWS
 VDGFNPNNFI RAIIAIIGVW VIGSVGSYYM GRAIYGVTVV DNRRSK

> aaRxA00601 (1-291, translated) 97 residues
 MRFKSVAAIA LSTAMIRGGT ASVANAQqVS PSSTIEIPQE FVHTVQNfVP GMTYGDAGSA
 IQSTAGSVAL NSTAGIILPI VLPFLGLGAV GSAALSA

> aaRxA00602 (1-753, translated) 251 residues
 VQKTQEIhSS LEVSPSKAAL EPDDKGYRRY EIAQGLKtSL AAGLGMYPIG IAFGLLVIQY
 GYEWwAAPLF SGLIFAGSTE MLVIALVVGA APLGAIALTT LLVNFRHVfY AFSFPLHVVK
 NPIARFYSVF ALIDEAYAVT AARPAGWSAW RLISMQIAFH SYWVFGGLTG VAIAELIPFE
 IKGLEFALCS LFVTLTLdSC RTKKQIPSLl LAGLSFTIAL VVIPQALFA ALLIFLGLLT
 IRYFFLGKAA K

> aaRxA00604 (1-291, translated) 97 residues
 MRMKSIaAIA IATAALAGGT GVASAQEAGS TAGSSNLSSG IQLPQeATDL LSFLPAAQAA
 QVEGAIQSTA GFFAVGLGST AIGSTAVTLG IADLLSS

> aaRxA00610 (1-864, translated) 288 residues
 MEPPKPVTYK ELAHEYSRRT FNKLFTKITG FVYLKNDLIN DPNLVtQALL KRCPEGVLRG

YAALKQRGYQ LLDDQWMPPII SVSGDLNRRD CSERGEILRRI EPENTLLSGN IRFVNDVQAI
 QDVFDLHSLN DFEDQVALID HLIQRPELF QELIQEPKLL KHTQYANPFA ESPQESRLRV
 RLHSLGYHGF IPQIHVEYDG QSYFLDLADP LWQVALEYNG GWHYTSEQRE KDSHRKNALK
 SAGWDVLEVT SKTLQNPNSW NNLIQQINSS LRRKQAQRRR RLPMQTVG

> aaRXA00611 (1-1476, translated) 492 residues

MSAAASRSRN ILTALLLLVP LIAGTIYASA MGLDVSRAW SAEVGTGAPA ASVATNNQEL
 IEARRAAGEA GAQAGFLTSG TEELTSGTQE LIDGAAPLEE GVSAAADGAA QLHDGLIQLQ
 AGTGQMGTGA TEIADGVQNA VEQLGGLVVV QQQLLGALNE ADKQLASSKI PEAEDLRKQI
 TEVRGHLENF GISVEMTDQL DQLRSGTRDL ANQLAVPGYG FHDGIYSATN GAAELSAGLQ
 ELEAGVGTAV EGFTALDEGA NRLDSMATLN EEKTSAVQRA LPVPQVPAGT IEGTADEERT
 SALAPMYAFL ISALVMLAGA ALGWATLKNK WLMAFAVIGV TAIGGIILFT VALGISIGAL
 FGALGILLLA TVVAGILSRI LLDVLGTTGA IVVSVLGVVA QAAVIGHVWS VTAVSDIALV
 WRVVGMMPL HYPTFAVTSI GNGGSAAAIW MSVAVLLAMG AIGAVALKRP KAVAVEVEEA
 VDADADQAAS ES

> aaRXA00613 (1-453, translated) 151 residues

MSELKDKIRA DLTTAMKARD KDTTGTLRML LSALTQEETS GTKHELNDDEE VLKVIAREIK
 KRRESAEVYT ENGRQELADV ELKEAAILEG YQPEQLDDDQ LNALIDEAIA EVGGEADMKK
 MGQIMKAATA KAAGRADGKR LSTAVKSRLS N

> aaRXA00614 (1-915, translated) 305 residues

VNKVSTIAKT LTFSSAALLG AGIATAAWGY SELKKFELKT VELPILKPGT LRGKKEFRLL
 HISDLHMIPG QETKKAWVSA LDSLSPDLVI NTGDNLSDEK AVPDVLRALG PLMNRPGAFV
 FGTNDYWAPR PVNPFYLFK KKREVSIDIL PWRAMRAAFI EHGWDANQK RLEFQVGSVR
 LAISGVDDPH HDLDDYTEIA GAPNVADALS IALLHAPEPR VLAQFEADGY QLSLSGHTHG
 GQLCLPGSKP IVTNCGIDRK RATGLNKFGD MWMHVSNGLG TSKFVPFRIF CRPSATLIKI
 TEQAL

> aaRXA00616 (1-345, translated) 115 residues

MKSLPRFAPL ITILALLVLV AIGGSALANN RATPNVESEP ATVNQRSTPT TSAYEPPATE
 SPEEPTTQIQ ESPVQPPVPA PAQIPQAPQV PLNYQYYDDD WDDDDDDDFDD DWDDD

> aaRXA00617 (1-1083, translated) 361 residues

MTAVVFLTLA SVVIITRSVL LSEVTNTANS AVEQEIEEFR RFAAEGIDPT TAQPFESGHR
 LMEVYLSRQI PDENEIVGI FPGELIQVDY SQLSGAHLPL LEHSDPLISE IRQTTLNSGV
 FSDLERGTH WGKVNFTAS GEADGEFVVA FFADNLKDQV NGQIQILILI GTGGLIASIL
 IAWLIAGQII APIRKLSSVS AKISNSDLTW RVPVEGRDEI AQLARTFNAM LDRIEIAIND
 QRQFVDDAGH ELRTPITVVR GQLELLATTP PEEQARSIEL ATTELDMSR MVNDLLTLAV
 ADSGTFIHAIH PTDVTDLTID IEDKARTISD RILLVDAAEG LVSLDEQRTV EAVLELFNGA
 L

> aaRXA00628 (1-408, translated) 136 residues

MASVFTKIIN GELPGRFVYR SENVVAFLSI EPLTYGHTLV VPVAEVDVWT DLPQNIWSEV
 NEASQLIGNA IRTAFDAPRC GYIIAGFDVP HTHIHLFPTD KMADYDFRNA MAADATDPAK
 MDEAAEKIRE ALDGLV

> aaRXA00631 (1-1455, translated) 485 residues

MENPYVAALD DENQEVGVKK EAEKEPEIGP IRAAGRAIPL RTRIILIVVG IAGLGLLVNA
 IAVSSLMREV SYTRMDQELE TSMGTWANH V ELNFDGVRQ GPPSDYYVAK VFPDGSSIIF
 NDAQSAPDLA ETTIGTGPH TDAASGSASN TPWRVMAEKN GDIIITVVGKS MGRETNLLYR
 LVMVQMIIGA LILVAILITS LFLVRRSLRP LREVEETATR IAGGDLDRRV PQWPMTTEVG
 QLSNALNIML EQLQASILTA QQKEAQMRRF VGDASHELRT PLTSVKGFTE LYSSGATDDA
 NWVMSKIGGE AQRMSVLVED LLSLTRAEGQ QMEKHRVDVL ELALAVRGSM RAAWPDRTVN
 VSNKAESIPV VKGDPTRLHQ VLTNLVANG L NHGGPDAEVS IEINTDGQNV RILVADNGVG
 MSEEDAQHIF ERFYRADSSR SRASGSGSLG LAITKSLVEG HGGTVTVDSV QGEGTVFTIT
 LPAVS

> aaRXA00637 (1-753, translated) 251 residues

MTDRITIGEEA ELLGVTTRTL RHWD SIGLLQ PSWRTTDDYR LYTEDDVERA LQILIYRAAG
 IGLKDIAEVL DQPDSANQHL RRQRELIVEQ IGQLHRMVRA VDEILGKDAI SVKEKIEIFG

EDLPKYQEEA FQRWGDTPWE KESQKIQEKM TKEDFQRAKD EHEGFVEKLI DASLRGIAPG
SAEGNELALA HRASIGQWYT VSANKQVILA RMYVEDERFN ETYKGHASYL LTLIEALQV
EGVDLENVIEW E

> aaRXA00646 (1-441, translated) 147 residues
MQRRARREVG LTEVLDRLE QPKKRGRIPF TRADLDNDAE LAEFETLEAI AAGDTLITGA
VFTGTLEGVA WEVQVDVLVR NPDGSYPVM VSNHRVARPD PHKTMQGIIV TRLGLGQPLE
LKATLRHHTI DGYRLTLALM GLEEAGA

> aaRXA00647 (1-633, translated) 211 residues
MGIFEAIRAA RAKTKAEIKA AEAKVKTEAK NKAKLDLKRE KLLVQOEKNI LKVEEKGLKK
RNKHELMMAK NILEQKRQGR LNKDKVKRWA GTARVLTPLL LPIIYRLSTE ARDQVVKGRA
RRAGVTAEQL SQFAGHAAAL KARIQGVRET AKNSSLAPGF VRDVEERLNE LEAANNSEF
MSPQQRNRAH QSISRDLNQV SDQIQDRLLD K

> aaRXA00649 (1-456, translated) 152 residues
MSTDPIAALE YESTIFARHR NQYTGQAGTN AGVLDSSGYN LLTLLQLRGP STIGELSAIT
GLDASTLNQ TKALLTKGFV ERIPDPGGI ARKFHPTDLG NELLNEERTS SQEKYAEELS
DWPEEDLRTF VKLLEKLNKA VETRVGKHWP RP

> aaRXA00652 (1-549, translated) 183 residues
MRRTLPTILA ASIMLTACTP AEPEATPETT TEAAPEVITD GLPIDAMPAV ERTAQATACPY
LGTDWVADTN GQRVTGYGTD ERFSTPSCVF YSYPEEPQLT VIVRDMATTD DAIIVVDWAA
PIDSTEPAAE PAGWSGGRRG GNDTSGALYA VQNGPTAVIV FTNQDQSLKA QLIAEEVIQN
LGL

> aaRXA00653 (1-765, translated) 255 residues
VSVSQVVGIE LLTVGILALL FAYYEAYWTN VESGKLQESA GQKLDDEWNE ARVNPRQKLT
PELGEAFARM YVPAFGSDFN FAVIEGTDEE DLLAGPGRYV DSQMPGEAGN FAVAGHRVGK
GAPFNDLGNL EVCDIAIVVET YNSWDVYRVM PMSTNGADRA AEAADCFNEN QVSRMAEGDY
VNVSGRSITT PDRIDATYPT PGVFDTAVRE GSEALLTLTT CHPQFSNAER MIVHAMLVEE
IDKSSGERPA ALEEN

> aaRXA00654 (1-1266, translated) 422 residues
VLDILIYPVS GVMKLWHLLE HNVALGDDSL AFFFSLFGLV ITIRAIAPF TWQMYKSGRT
AAHIRPHRAA LREEYKGKYD EASIRELQKR QNDLNKEYGI NPLAGCVPGL IQIPIVLGLY
WALLRMARPE GLENPVFQS IGFLTPEEVE SFLAGRVSNV PLPAYVSMPT EQLKYLSTTQ
AEVLSFVLPL FITAAILTAI NMAMSMYRSF QTNDYASGFS NGMLKFMIVM SILAPIFPLS
LGLTGPFPTA IALYWVSNNL WTLQTIIIM VILERKYPLT DDFKVHLEQ RDIYRAKQKE
KRIFLWTRRK NRALMILTPW NASTLHATNV ELTKTRTAEI NEAKQARKEI ANKRRETQRE
MNRAAMQRLK QRRAEVKAKK KGLIDASPNE DTPSENEETK LSSPQVEPTT TAEPNREPSQ
ED

> aaRXA00656 (1-261, translated) 87 residues
MLALGWITWI IIGGLAGWIA SKIKGTDAQQ GILLNIVVGI IGGLLGWLL GIFGVDVAGG
GLIFSITCL IGAVILLTIV QFFTRKK

> aaRXA00657 (1-903, translated) 301 residues
MSTEDIVVVA VDGSDASKQA VRWAANTANK RGIPLRLASS YTMPQFLYAE GMVPPQELFD
DLQAEALEKI NEARDIAHEV APEIKIGHTI AEGSPIDMLL EMSPDATMIV MGSRLGLGLS
GMVMGVSVGA VVSHAKCPVV VVREDSAVNE DSKYGPVVVG VDGSEVSQQA TEYAFAEAEA
RGAELVAVHT WMDMQVQASL AGLAAQQQW DEVERQQTDM LIERLAPLVE KYPSTVVKKI
ITRDRPVRAL AEASENAQLL VVGSHGRGGF KGMLLGSTSR ALLQSAPCPM MVVRPPEIK
K

> aaRXA00661 (1-690, translated) 230 residues
MNPITELLDA TLWIGGVPII WREIIGNVFG LFSAWAGMRR IVWAWPIGII GNALLFTVFM
GGLFHPTQNL DLYGQAGRQI MFIIIVSGYV YQWSAAKRRA LTPENAVAVV PRWASTKERA
GIVIAAVVGT LSAFVIFQAL GSWGPWADAW IFVGSILATY GMARGWTEFW LIWIAVDIVG
VPLLLTAGYY PSAVLYLVYG AFVSWGFVVV LRVQKADKAR ALEAQESVTV

> aaRXA00662 (1-1269, translated) 423 residues

VSTIPLNRLA VIAAIIGVGT GLFVAALNWS AIGVERLVYG ADHLHYNYPV ANVSPLRLSI
TVIVLSVVAS WAWFFVHRTG PKEVSIVGAI RGEKMPILET IASAFLOVTT VAAGAPVGAE
NAPRIAGALV GERFSRWLQL DIDAKRILVA SAAGAGLGAS FHLPLAGVLF ALEVLLVEAS
TRTVVIAIIT TTAAVATTGF FVQTPDVST VPLTESPWML LAAMVTGVVA GCMGHWFSAA
AHKMAQASPK GVKILWQMPL GFVVIAAVIY FFPETLANPR WLADSM LGDG LILSTILLVL
VLRTAMFLLA FRVGMVGGNL IPAFALGSMV GGTVGAVLEP ITNVPIAAFA LLGAAAFSTT
TMAAPLEGLI AAVEFTDMEA QGYLPIFLAV ASAVLAVRVW SVIAKHELRA IPITYASWTG
ELK

> aaRXA00666 (1-387, translated) 129 residues

MTAGEAIAHS VRAAQIAEEH NYARFWVAEH HNSEGLASSA TTLLMGHIAG HTSRIRVSGS
GIMPNHSAH HVAEELGTLE AIYPGRIEAG LGRAPGTDPM TARELGRASS LVDDVLSTIV
SLQNYLDTP

> aaRXA00667 (1-585, translated) 195 residues

MIALKSMSNR VVQKPKMKAP LPIRDGLNPS RVRLPLDAAP IRAIDFVEYL ISTQRHRNPA
DNAELQARF DADLVVNHYG EPYAPDTMVQ PDDDIWFYRM PAAERPIPYK IHVIHEDDDI
LVIDKPPYLA TMPRGRHITE TALVKMRVLT GNNDLTPAHR LDRLTSGVLV MVKKPELARGA
YQTLFARREA SKTYE

> aaRXA00668 (1-792, translated) 264 residues

MLTTLWIAVL VFTVPGLVVS WVSGLKVPWA IAASIPATFG IYGLSAWLLG LWEMRFDLHS
VVISTLVFAA VALVWRLFFV GGWLVRRRKA RIRRQTLADE ERAENAEVSA GEPAESSTNE
AAESESETE RRGIVRVIFD YMRDGGILDH RWLLPAAGAI TGAWLIIDRA VDLLLLSTEHG
LGDIVQGDV HWHASTVRFI DETGIASSTM MGQLRNIETQ QDLFYPSAWH AGAWVLSVVG
NLTIVEATNL TGIVLSGLLL PLAV

> aaRXA00674 (1-750, translated) 250 residues

IFAAALAFMG MFQLHPAPST IVIMVLLLWW LLKLVVVPSQ KVKGWKAGIG IRLKDVGILA
ITGIIGVLFM LPQVISGSEQ TEDVLSYSAE EQVTRSESWL VSIFMETRHV DFFGNIDIVP
VLVFAAIGGV VALVWRGNLW APVFYFASVA LTANSLKPFE EPWGDWLNIV GGLHYSTGHR
LIMPVAMFTF AAAGIGAAV IRLICLGPIK KFTTVSGVVS VVMALVVAVP LQTWAKDFVE
EGSETTILAP

> aaRXA00676 (1-747, translated) 249 residues

MAKNSRIRYS ASIKRAAAAI LTAAATSVAL IAVPATASQA DLATGSSQIQ TDAREGAWAT
RNTIQDQLAS IGPAALPVRA AVDNAINGMF PGLVDEKVAA EQEAAARAEAE REAAAAREAE
AARVAAEEAA RFDRGSCPAI ADVCVDIDGG RTWLQENGQV TYGAVPVSSG GVGQETPRGT
FYINRKVKDE ISYEFGNAPM PYAMYFTYNG HAFHQGNVAT TSAGCVRLNT QDAIYYFNNV
GIGDMVYIY

> aaRXA00678 (1-735, translated) 245 residues

MTRSNLPawe QADPSVHASD PRAITFAEDF GIRPIPAVGP IDTTAICATP SNGFEQLWKA
IEPETRTRAN DIHLPIVVAY AERLCDAVPL ADRELVLVAA ILHDTGWAHV DESRIISEGF
SGNWRKAAIR FEHETEGCTV ARRVLPGLY TVDFVEHVCD IIDGHDTRQV AYSLEDALVR
DCDRLWRFRD AGITASSSWF GMPVSDYVDR LHREILPELI TEAAHQMATA DLNRAKALLR
TDAIR

> aaRXA00691 (1-930, translated) 310 residues

MVEGNTIGCA DAGNGYQTL LDAGFDVETT VQFPEFLCRI NDFPGPDVDD CMTASPAEAY
WSYWHAPLGG DEWEYSNLGA FLYYPKPGTV EAWYWGDTDR PGAIPVSKSQ AELGLDSADP
DYKIDFDPND FITTPTSES PIADLGGDEE PTETTEAPIA GAGAGSARGQ AAEPTEVENP
ENPNEVLVYQ DSEGNsitKG QYENLVAAAA AKTTAAVQAP AGAGEANSQP QATAVAEAPe
VDPMTTQVLM APAGQDGDVM AEGSTQQTYA TGTVDSSAQG WIIGLTLAVI SLVSASAVAA
WAIRRSEVQG

> aaRXA00692 (1-1134, translated) 378 residues

VALATGVSLL APQVVAAQDA SSDIQLATQF IEKEFATNGL IPGPVGTPDI GLNQDLLLSL
NALAPDSPEI DAAYAAIAPE LEGYVSVDY IFSDLAKTV AFQDALGVRD ADFIAQLVSA
VQENGQIKNL DNGEATTAIN NFSQAWGVLA LHRVGETEAA ERATEFLKTQ VCSDGGVQLA

SAIEPTCKTT DSDVTAMAAQ ALTLANGAQD PTTQATLDYL VTTMDETGGV KNTWTGVNSN
 STGIVGSAFA LAGDEENYLK AREYLASVQF GEDADPSIQG GFAFTVKAKE TNTAISDQIR
 RATGQAALGF AGGNYANDKL ITIANPVDPT PDPEIPTPPA DSEGSTGGIG GAGIIIAILA
 ILAAIAGVMG PMMANLQF

> aaRXA00693 (1-483, translated) 161 residues
 MWKEALEEFG SGPIHGSGYF ENYLPIDYSE AGFHHYLLKER TDAADPSVPP PEGFVHCSYF
 WIVDDDDVLV GFLALRHELN QHLLLEVAGHI GYGVRRPSARR KGAATAALKL GVHEAQALGI
 DKVLLCVAGD NEASRNVIEK CGGVYESTIR GMRRYWIATD S

> aaRXA00701 (1-375, translated) 125 residues
 LVGEPRSDSC GEQRCCEQSG VAEDESEAGS EGSSAEDEDK EDCFKACCAG TEWSDYGNHG
 GEDAEHGYGF NVESVFTDFG DDSGQHEGND DRDVEGRLGF VGQEGFRVDD QRPEENHDAQ
 NRKEA

> aaRXA00704 (1-513, translated) 171 residues
 LTITFSRVAL TTLAVTATTI SLSTAANAQS SLLDKTLDAR QCIDADNVVW SVDYGDSEK
 EPEGACATEF TDGVVALESA GFKLTFDESE MGKYMGTING VVPDWVETGT YWSYYSGEVA
 DDYSVDITYY EVGASNSEPE GGTVEAWVVG TGEETPALET LSETSAATGS S

> aaRXA00707 (1-972, translated) 324 residues
 MNVQRKLLAI VGAFMAGSLA LGTPTAQAQS IGSSASQRTS VLRGLTSSAG IPDATAPEGG
 AKVVVFGDSH ASGTNAPFDV DERGCLKGNQ SWPDQLQAQQ GLQQGELIDL SCNGASINST
 GFHFSDEVRR AEALGAIGPN TENIFIQFGK NDQWGHSPIN LRYSVINCLF DAANGCGEKA
 VAAGTMQDPS SVTGENYAQR MKPVIDYLKY YAPNAQITLL GYQEYTPRSG SEICVRVGGT
 ELRKP DATNL VSYMNNLESA IFEASEILDV QHANLREATA GHSSCSAEPW VNGVLDMRVN
 AVGGTWHPSK KGDEV TAGLL GTLM

> aaRXA00712 (1-549, translated) 183 residues
 AAEPTRRTTV QSATEASTTA PVQCNDLPRT SDFGPYLAQS RTPVGELAGS ADSVVQVPDW
 FYHFQMGDNG YDSCSKLSYV VLNGSNGDAE RSTGTGAAIA DVVVLFDIGH MVARPAPFEM
 KTVESVTRVS DSEIQVVYGH AGRSTAEGVT DYFTFNFFVD NGVLSGRGDL PEHIDTHMRL
 YLL

> aaRXA00713 (1-963, translated) 321 residues
 MTKVAELDQE WSEVDDAELD AQSAGTSDSS STDDFADAEN TSENLGPIGP EPLPEPDGDV
 PASGFQVQLD NFEGPFDLLL QLITKKKLDV TEVALAQVTD EFIAYTRKLG ETSDLDETTE
 FLVVAATLLD LKTARLLPRG EVDEDDLEL LEIKDLLFAR LLQYRAYKQV AEMFAQWQRD
 ARRRYPRAVS LETQFANLLP PVSLGHSLKS FSELAADVFR PKPPETVKTD HVHQAQVAVP
 EQAGRIILNTL KLAGIDHYLS FQLLTRDCTA SMEVIGRFLA LLELYKARAI ETLQEEPLGE
 LKVSWTGIDV DPAVVAASDW E

> aaRXA00714 (1-561, translated) 187 residues
 MATITRTDRL ILVPLTVELE DEAHQIYSDS RIWEHRPQAR HTNVRVTRDI IKRTNESWGK
 KDLGPWGVYL RDRPSEFVG VGGVELIDGKV WDLKYRLRPD LWGNGYATEI SNAATLATKR
 IDDSLPLTAR VTTNHPASFR ILEKLGLTPV WEGRRVGTED DPNEPDVRIY SDRPLSDEIL
 EMLKQRP

> aaRXA00716 (1-513, translated) 171 residues
 MESILLVVDI PVSARTLAGV LGIDVPATEA ILKEMAFELS ERSGIDLRE TAEGWRYYTR
 PENADIVEQF LLDGNQTRL SRAALET LAVV AYRQPVTRSQ ISAVRGVNVD GVMRTLQLRG
 LVKEVDVDES TGAHRYGTTE LLELLLGIDS LDKLPDLAPL LPDVDSIDED F

> aaRXA00719 (1-1629, translated) 543 residues
 VTDKHTMPGE EDDTVFVYHT HKGEMDVEGA FADEEELAPH GGWASADFDP AEFGYEDSDS
 DFDAEDFDET EFSNPDFGED YSDEDWEEIE TAFGFDPSHL EEALCTVAIV GRPNVGKSTL
 VNRFGRREA VVEDFPGVTR DRISYISDWG GHRFWVQDTG GWDPNVKGIH ASIAQQA EVA
 MSTADVIVFV VDTKVGITET DSVMAAKLLR SEVPVILVAN KFDSDSQWAD MAEFYSLGLG
 DPYPVSAQH RGGADVLDKV LELFPEEPRS KSIVEGPRRV ALVGKPNVGK SSLNKFAGE
 TRSVVDNVAG TTVDPVDSLI QLDQKLWKVF DTAGLRKKVK TASGHEYAS LRLTHGAIDAA
 ELCVLLIDSS EPITEQDQRV LAMITDAGKA LVIAFNKWDL MDEDRRIDL RELDLQLAHV

PWAKRINISA KTGRALQRLE PAMLEALDNW DRRISTGQLN TWLREAIAAN PPPMRGGRLP
 RVLFATQAST QPPVIVLFTT GFLEAGYRRY LERKFRERFG FEGTPVRIAV RVRERRGKGG
 NKQ

> aaRXA00720 (1-666, translated) 222 residues
 MASPRRPQVA APRIKELRLT GLDNADPQDI ESNEQIESCR FNEAELSERD LSGAGFIECE
 FLGLEAHETE LRRAQFVETR IERANAPSFK AARSIWRNAT ISDSRFGAVE MYEATVQALK
 ISDSKLSFVN LRGASLRDVL FENCVIDELD LGQARAERIA FKDC TVHSLT FDHAVLSNVD
 LRGLDIERIS GVESMSGTVI SSLQAADLSG AFARHLGITV ND

> aaRXA00722 (1-504, translated) 168 residues
 LLPNGLLTKR ELVSIERSSH AFEQSVVILP TATLVAGLAA VSVHEPAQPL AVDSYAMAEA
 AGSMRTATIR AATSAALTQA GACSKGDLIS FIGPEIALVS EELNDALSRT ALRLLDGSSE
 QITLLIAQDR QSAFDEDVFR RGLGTHTDVE ITVYPATGME NLVEIGVE

> aaRXA00724 (1-648, translated) 216 residues
 IGEEVLGRQ AYVVCPRIEG EGGVLEIHAY LSEQVYPGLN VGMLHGRMDT DLKDSVMQEF
 AQGEIDILVA TTVIEVGIDV ANATVMLIRE AERFGVSQIH QLRGRVGRGQ HDSLCLLHTT
 FDEDSPPQQR LAAISTTTDG FQSELDLQV RQEGDVLGTR QSGSDTKLRH LSFISDQKII
 ERALIDATEL VAASRSRALE LVSDIAMINQ EYLEKS

> aaRXA00726 (1-141, translated) 47 residues
 HEMGFAHEVA DQVVFMDGV VVEAGTPEQV LDNPKEQRTK DFLSSLL

> aaRXA00729 (1-642, translated) 214 residues
 TVVEDYQEFT RGLFLGMVAV SILVPLGMMD MRDAKKRLAI VIPLFIICAM LGFFGTSFTS
 APRTDPSLIF VFICAAIASC ALVLPVSGS FLLAVGMYA PIMESLSNRD LSVIGVFLG
 ALTGVILFVK VLSYVLEHHR TITLTIMAGL MLGSLRALWP WQGDANLLA PGDNAVMIFF
 IILGGAIVA ALMFAERVSS KNIDSETVAE EHPR

> aaRXA00730 (1-333, translated) 111 residues
 HFVVFQKQLQ QADPNAEYDL DVLAFDIARV ANLLRWAAAT DLLLPAEARW FQDQLGIAAA
 VSFGSWEEYG ERYVRGLQKN FKGGNKPYIE GERWLNTEAE SPWKTQKWIS A

> aaRXA00731 (1-2472, translated) 824 residues
 LLFGLRWLGR SLRFAPLSLL MIVVMRGLRE VFGAEDPANS SLVDNLGLTL PWSLNDPHFL
 TAGFSASTTT AALMSTLWII VFAVPSERIL GSLKFAITAA LIHITSIPLG IGIAHLIEEA
 DLNRWGNMML ADVLLTPDFW VFGVAAFASA SMPLLWRRRT RLFLFTITLT LLLYTGTLDAD
 VTMLTATIIG TVAGELNRHR KTPGGRWLPK SLTVREARIM TAILVTAVAA GPVLAALNPL
 THGPFSSATK LIWQPLVTEE HMHHLCHTDS TSDACQGALD QLQGHVGPS VANLIPLILT
 VVLAMGLSRG RRLAWILAVL AQLISIAVLM FQLTKLSADS TDLLWSVNAF SVIVPWLVAL
 AVLVSFRRFA QVKIDTTRIS KSLGALMVTW LATAALWILA TFLPLHAFHP HPTLGLAFKE
 LPFRYLPPTI ETVLSHQLEP RSPAGWAVFE WTGTLFWLVV AATLYHLLMG VPSNKAHEDQ
 ENAATLLRSG SGDHLWMTI WGGNTYWWAP ENAGYVAYRV KRGIAITLGE PILGPDSSVS
 KAELAAQFEE FASNQGWIVA WYSVCEEFSK ERINAGHHTL RVAEEAVLSS ANADFKGKHF
 QNVRTARNRA AKEGVSSIWT TWADLSAEMQ HKIITLSEEW VSDKALPEMG FTLGTVNELS
 DPDTYLLLA DEEEHLHGVV SWLPVYEKGR IVGYTLDVMR RDPQGFKSVI EFLISEAVVI
 ARDHDLEWMS MSGAPLSTPP GVADDGTIGQ ILELLGRAME PFYGFRLAA SKNKFHPEHH
 GWYLCYRDEL SLPSIGLAVA ACYLNEFPPL NWLKKTATSA PSHS

> aaRXA00738 (1-288, translated) 96 residues
 LLNDATTQVS HILGNAFTRS GLNAEYANLY GQALVGMVSM TAQWWLDERT PPKEEVAHI
 VNLCWNGLTG MEADPKLTPI SSAEGAIFGQ EKESEA

> aaRXA00739 (1-816, translated) 272 residues
 VTATVLEPQP VOLSEQDVDA EIARMELKHN RHKTWRRRTM AVVMTLLISV GLSFGAFGNK
 EREANAFASA IIAQVVGAMG EVAFAICPS DGDTEMLLKC ITENLGEMHI IEKCLEAEDV
 LKCFYDAKNE EQRKEQNLDK APDYSMYRMA SAMASFYNG RAATAGVEEG GPNEFLDSED
 AGLKVWEGIL SKAANGGNVL GYADAKHNED SGWFFGNGVA NNEKTSYDS LADHAFQGPY
 HFALFGATLS GLGFDSSKAE DSQTDFAQRK GM

> aaRXA00740 (1-579, translated) 193 residues

MLKNKTLALL AVSTLMFGLS ACSSDADGPD SSGASSSSTG SSSASADTTD SAAVDKDAQL
DTFMRSVAVD GSSAAVAVDN AVGKGFDKAD AQAAAERLGD GFQFAADYQA VGYLESWYFG
GARSEKLDEV RSDVIAHLSE LGFTDLEAES SASRITLGDY CDGVPEYCEL FFDGESPDLY
DMGTELDSEYK PTE

> aaRXA00741 (1-933, translated) 311 residues

MTDSLIVSIR_KGLIEERPLT_ELLRACIFLG_SDTNSDSLQE_WAKNELNGYG_SIDGIPEYRK
LKGPPVFAKI QAGNSIMSNM VLGPHNVPER ARKYFPEELH FDQPIQTLIE WSTRQDGINL
SPPNLLRVRD LHNDQYAPLN QILNLNVYLD NSYFSGIVDR IRTLMTSMIA DLTHATPLDE
LPSSEKVNAT VMKHIENNYE TTITQANGAV AIGNSAKAVQ KGLSVDDLLK IMQTINPEKF
DLGEARAEAE ESQSIADDEL KKESPNKGFI QNAFEKLKEL SIKAGDKAFT TMLNLVGKQI
IENIPQLVSG G

> aaRXA00742 (1-1650, translated) 550 residues

VNVQIKGRKV NAKAADLNSY PVSVDLRGF VTLAGLLFFV VDIKKSNNK YPKYVLLKPF
YIHDLLSKAK PGQKTISVRL KRLPSDEDRM EAIIALALAS RQEKIVENPS NYLYENMESI
TVKSAEPLNR DKLAVYDGSS PDHSIIIRTG DGIEQFVNAT VEIIPPNMQF HQANYNVSCN
GVVYDNLHR NIDDEHIELK IGKGITLRLQ KLAIDAPGSV TVEFQDSLPE RLKDIEFFLG
VLQANTFFIN EEPVVLKINS NRTVADLKDE AGVLRQLVEI ANHFNIDPSL IRIGEITEKQ
FWQLDIVYRT AVKGEYVKNL EVKDETRLIL QPFGRWNLAL IAHPGDVAGE WTYHEVISKR
HHFAMTPSTD RSDSSIERVT PYELIDNRWL PSVLNLHLDK LVDFYSALEE TVDVDNLATW
MVLRLIKAAD SEQSRKTAFL IAAQALNDWL VERDREESPI YRLNGWQILY RQTGLDSQR
TEIRSFHNL DQTMHPDNYS EIMIGCALLL DDREEANFLL TQLSVDRRAV FNEWPIAQLM
TGALKEEIEK

> aaRXA00743 (1-423, translated) 141 residues

VQHLVLADVK YRELSALSVK IEEPSDRPEF KLGVTVNDKS KDEEGVPRII EVSLRVSIEV
PDGKITVEPE AIYLIPENKV YLTESDAMVD YFNNHAIFTL VPYARQAVSD LGQRAFHTQI
LMPALGPGDL VFSKSTASRE W

> aaRXA00745 (1-534, translated) 178 residues

VAYLYGSADG MLNTDGFNMF PRASYTILGP MDADAVGVYQ QLLNSTIPMD LARLVTTTHNS
GASYLRRGAT NVVFETNLAL GVNPMKKRR ATEAQRGKKR FKRD SHYGGG TVTTGTADLD
VVAMQARAHE REERLGEKST RKKEELAAVE AKELAACKGP QTVEEGLAAV EKKHLAKR

> aaRXA00746 (1-1191, translated) 397 residues

LVHTDRVSIH RAKNGVRRTR KHIKTICIKH PIGRSVQISH SPTALSDAEN NAELTTAQIL
HIDPVTGVAI PRQNILLGED FQTMASFSQ IRHGWGITQL IGQDPNRNQF IRSADTWTVT
GSTGLTGENT ATHNTDDTDA TAAITMPASD PAVGLCALES NKDAPVDEFR DLSLSALRTA
TVMSSSGSAV ITMHDPMVMS TTGALEARAY VDGEVINQHD LDSLRDQLGI TTDSADTPA
LPADPLAALG LSTPTTSALV PGLAELCLN TDQARTWHR DNSIGTGKPA ILAVINAELA
DDYTLQILKN STATPTDSTD SSDTAERFVA QLPAETAFLV IDPDIGAVTD LFFINSINQD
LPAPTTQINS VAVDQRDPNI IYATFANDDR VYQLMLG

> aaRXA00747 (1-588, translated) 196 residues

MTFLHRSASF HPRTHDLSE LGLDPYKLSQ DIPTVIYEVQ PHSVFILKFN TADVRVYQEH
SDLFVRHAVL VDPEQRKHEH DQLLEILDL DAPRVNDDIS GRTTVFLHDK TVVTHSGGPI
AIIPHNPDAV SAAASANKHK QSVMTTSRHP YAQMSLSMDL KQGFTLTPLF FPYCAVDDPD
SSRHTMHVIN VRDHTV

> aaRXA00748 (1-444, translated) 148 residues

MTYFALVARN YAETGVSVEF HEVDDDADNS NGPNNTSNLP LKLLRDHSFD ATVVYGDVLV
HTSAHLRDTA IANSNRPV VTTAQKFFDY IRLATRHGAI HDMINNAPDT GTDIVVITAT
NDALISDESE YYDELPHILE SAQGVLK

> aaRXA00749 (1-699, translated) 233 residues

MLRKTVTGGI VALIATATLM NSVSSAEVVS GDVSAVDLAF AEFERTTAED VANGVPEAIA
NAEKISNFTP SELEGFKSL ASDAVLRVS GEEILPDNVE VVQTDNVGDE DPNVISPAAW
QGSDYIEGCL TNTLYGIEVL KVCTGGTYYS NVGIATSVSN PRSYVKYNSA PGLAVTTSNP
RGGIEGGLAA FYGDVNLVAF PNIPWVGPISS SAGTHRVA RSPNSVVLN VYY

> aaRXA00750 (1-438, translated) 146 residues
MDWSIIINVL AVATVVILTL IIAAALYRGF TRNKIKKLEA IREAQQHERD NPTIRIADLR
GIMDTHHYIY TDVMVTRAHE LMITAPAFFD VTLPEAVLYE DTKRAAHDAL NGYKDDTTVAS
AEKIMLVDAV TAAWTLYSTK ANTGST

> aaRXA00751 (1-828, translated) 276 residues
MLVRSRTLVT AALSCSLLFG ATVNGTGVAI AYENVSMAAQ YEPYRESLET RLGSSGVFPK
SVEQSVENLA ELPEETRFLF EGDSFSIIID DGLLASRLDP NTGEIRHTLG ASGISYTPGE
MKRSYTDRVT VKVVYPDGSF DRVTPHSVVY VADSIYYGIE STGYPKVRNG QTVKIPLRVT
DGGTGAVGGV PQGSKVVRDR YGSIENAELM GAILILIDEKT GDLTFTAPDD RTGQLWFRTE
VTFPDGSDSE VQYVIEYTDQ PEPVDVIRPA GSSLSS

> aaRXA00752 (1-429, translated) 143 residues
MYSDKLILLF LSEQDSSYEC CVGLLDGSDG LDYIEKLLKG RKLKNHFLEW EDINKADVAR
EEIYKQQLVH LVFVTALSTP GEISFVFPQG SLMSATLEED FAALVLEEER TSFRPELSHL
WSPVGWVAP GLEGFVERNS EAA

> aaRXA00757 (1-1254, translated) 418 residues
VSFGVVKRPD ACYALFAILI KRNQATAVSA PMARQRQWV HARRGHFERV TRSEVELSAL
LGGVEKLSDF LAEYFQLVEI GAGIRIYLDG DGGFWTCFGH FQALEVEFVG CGERLDERRQ
NFSGWKSHKD KDNLPKIIIG LLHCEAMRRR IPSVLGVSL AAFVLACTPS PNPNAALAQM
YQDALFDSQA MSEAEPELAT LRSQHAEDEL AEIRRICGFD EGQVPESCQV TVPAIAILPT
DDPEKYVND S QALILDNLDD IPEDSVALV EQYIAQAEFA EGSEVSVVPD LELTEAELAA
AKDLADREFS AAWSLGVALA QLPETDREEV ETAISNHHDR ASQLQIITSG TTPAPGVYSE
LPDPTDETS RSNITVENN VTQAWHAAS AATTDARVF CAHIAGDTAR ELTLIDVS

> aaRXA00763 (1-783, translated) 261 residues
VEKSRKRLVT IAASTIGAVA VAGGAFWIVD ASIAAHAERN LSKAVAESAD LENDPRVFLG
SSIYSTAFFT GKLDVSIDM LDVEIPGVGM VNARTEVESV EVSRDQILSG DLDGTTAETF
TRTLRMDGVA IGAQLGITDL DISHPIDISP SGGITSEALL TGTPDMDP VSVLVTLRLV
GSEFQMLPYE LIDAPSGLTL DDVAPDFTWK IDTLQLPLAD RAMAVYLSGG SVHFQSEARN
VQLTTRELSP LAAPEENSDE S

> aaRXA00765 (1-687, translated) 229 residues
MSENSTPNP VVPGAGADGP SLSDSASISG SDAVNLAEE SKSTAHRNIP GLGDLPIPD
TANLREGPNL HDGLLALLPL VGVWRGEGQA DTAEDGQYAF GQITFAHDG ENYLSFESRM
WKLDEEGNPT GVDQRESGFW RINLKDEIEF VCTHAGGVVE IYYQPLNER AWQLESASTM
VTATGPSTLG PGKRLYGLLP TNELGWVDER LVGDALKPRM SAQLTRVIG

> aaRXA00767 (1-714, translated) 238 residues
VGTIEDVANE QIEVANNTDQ IPAGYKSPLL SRSGAAEAQG AAAQAGTEGV AWHYGSPLVE
QRIFETGTGL VDRSNRKVIK VEGPDAPTF L NNILSKVDS VENGFTAGAL DLDAQGRIQH
TMQVTVVDGV FYLDTSAAEF DTLIGFLTKM IFWSEVTVQE ADLAIITLLG QEIALPDAVF
ARRVDWNGPS RIDVAIRREN LEEGVDKLLE AGAKLTGLMA YTARAREGVG ARCGRGFG

> aaRXA00768 (1-444, translated) 148 residues
VKALEPAAGV DLDDKTIPHE IPHWIGRGEH LGAVHLTKGC YRQETVARV DNLGRSPRLV
VLLHLDGSAP LDPVTGAEIK AGARTVGR LG TVVHDADYGP IALGLVKRSA LDKELHIDDV
SVNVDRDLLP AESEQRGRA AINKLKGL

> aaRXA00769 (1-213, translated) 71 residues
MGRGRAKAKQ TKVARQLKYS SPMDLDSIQ RELANQSPRR SYSDTPDDED QYAEYADWDE
DDTDNRAYGT N

> aaRXA00771 (1-678, translated) 226 residues
MTNPYEAFIP LKHRTGIEPE HTFEWENKR VHIARRRREA PVRVIVVHGL GTHSGALWPL
VAAIEGADLA AIDLPKTPLY DDWLRLLESF ISSEDDGRPL ILIGAGTGGL LCAEAHRTG
LVAHVIACTL LNPSDQPTRR ALFRFSPLTR LIQGR LRNRE IPVTRVLNFS KISRSPALSK
LCAADEFN GA FKITWGFLAS YVQHKAKLGA VPLTLMHPDH DLFDSR

> aaRXA00781 (1-288, translated) 96 residues
 MSENKNIEIV HNEGQKRFEI SVDGTPAGFA SYLDGPDIRN FNHTVIKPEF RGQGLSAPLI
 KFALDDARES GIRIHDACSA VAGFIQKNPE YKDLKN

> aaRXA00785 (1-621, translated) 207 residues
 IIATLGVTLT VEARGLFLTV ASIPIILFGIF TPLTSWFVSQ QGVAANVSPG VSVTEILTAV
 YPLAQLFPTL IMVTLLVAALI AVVRIILLRR NQESRQVSGE LTRRAQREAE EANOQAARRA
 RAQSTRVQSS KTRNRRAOPT GDTGSQVTVD ELIRRSQERR QTVAQRQTER GVPFTPTPGP
 VVAPKPRPSA PEAPAPTDVG ERRQAAP

> aaRXA00788 (1-225, translated) 75 residues
 MASSINIGVF NLGNAVAWL AGATITTSLG LTSAGLVGGL MTSGLGLVLA VAVVLRRKAQ
 GTQATISVVE HQPAQ

> aaRXA00795 (1-528, translated) 176 residues
 MIISLVVSAI IMLVAVGFTG MCSFNTGSPE NGQVPEVDAS TFMSMEARAM TDHATRLPET
 PEGWTTNSAR RTMVDDTPAS VVGVTADDEG YIQLTQTGET VEDAVAGYDT RWRDLSESYD
 LDGHVVGIIY SQESDVRDLR VMDLGDARVM VSGAATDEEF NDLLRAVANS EPLPTN

> aaRXA00804 (1-444, translated) 148 residues
 MKIRSAREIA EWFVAWGDEL DAEVSPLKLQ KLLYYSQGEH IAATGRKLFS DKILAWQHGP
 VTPGVYSYDT SYGRNPIDPD EFVSDEFNWD DYSDVSEDLV TVWRKYGIYS AWALREKTHS
 ESPWLDAAQ GQNIETDAA LKDFFLVH

> aaRXA00805 (1-882, translated) 294 residues
 MAESFIEVSA GHADRRIDKF LRAQLKGVPA SLIFRQMRKG DIRVNGRKVD PNYRLQEGDR
 IRMWQMDLLA DLPPPVDKH IFKAVADSVL FEDAELLVIN KPAGIPVHGG TGHGGGVIEA
 LRQKFPQERD LELVHRLDRD TSGLLLVSKT TSVLRELQEI LRDREEEIFR GYLLKVEGAW
 PGDLRQIDVP LKRTETTVPV HSDGLRARTY FEVVKRLPGA TLVKAQLATG RKHQIRVHAQ
 YAGHPVIGDP RYGSRGGRAA TMHLHAAELV APRGAGKRQK FTAPLPKEWG MGRV

> aaRXA00808 (1-678, translated) 226 residues
 AGFNEMMRGL RERQVRDLF GRYVGAEVAK RALEERPTLG GEDRKVAVLF VDVIGSTTFA
 VNHTPEEVVE ALNEFFEHVV EVVHRNKGVI NKFQGDAAAL IFGAPLPLSD ATGHALAAAR
 ELRAELKDLQ LKAGIGVAAAG HVVAGHIGGH ARFEYTVIGD AVNQAAARLIE IAKTTPGRTV
 TNASTLREAN EAEQARWILM KSVELRGRSQ MTQIARPIRP TLADRS

> aaRXA00812 (1-1059, translated) 353 residues
 MNTITHQAIL IAVEDPVLHP EAMHVAAATG RPVIETTINM DISRHFHRTS AVLIDASMAS
 QLSPGKRRDR VFLDSDPGP SDWKTAMKIH AEQAMLLPAQ AGELLSALGR DDKQLPVASG
 HVIGVAGVVG GTGASTFAAA LAKRRAESVT TVLIDADPSS GGIDLLLGIE DVPGARWPDV
 GLRRGTVQAA DVLKALPSTP DEVVVLSTAR SNILDPFALS ESDVSAIDC FLSADRSVDV
 VVDLPHARVH PDIAERLSHL VLVIPAEVRA VAAARARCLE LQQLHVSITC VLRHRGWSGL
 DVAEEVEILG ADITAEVGSQ QRLAKSVEMH GLTGSLPRVL SSACDAVLGE VAA

> aaRXA00814 (1-774, translated) 258 residues
 MVYALGLLSV AVLISGSRGP GARTRPPTPG NGVHLFALIA LFCLATVLFV VVDAYTMIAG
 IIIATTFLFW LRQTHAAQR TKQSLQLASF LSLCAGNLRA GVTMVDAMDY ALDNTTPDKF
 LSPTLQTAAR QARSGSGGPR VLIDASLPDL QRLGHLWETS ERHGIPLVAL IDQMRSSISS
 KQRHGESTRA ALQGPQATAV ILTVLPLAGM LMGTMAGANP LGLLTGGGIG GFLLVIGVGL
 DAAGFVLTHK ILQSASPS

> aaRXA00815 (1-573, translated) 191 residues
 MITALVLAAM AMFLGSPNPG VRGGLISPKS GKSLRIRAGP KKLGNADPVD VSADIELFSA
 CLDAGLNTRD AAQVVAHVAA ITHRELWTHV VALLSIGVSA PQAFALMAGV DGLDELANLA
 TVSHRSGSAL SDGCRNISTS LLASAGDKRT AAAERAGVFI ALPLALCFLP AFMIVGLAPV
 VLSLGTQLIN F

> aaRXA00816 (1-297, translated) 99 residues
 MTIASAGVAS ILISLLVLA WQAGNLVARE QAQVAADVSA VAGAYAFARG ELPDAACATA
 KHTAEANNAQ LENCATEGED LTLTVTVRGQ EAHAKAGPL

> aaRXA00826 (1-531, translated) 177 residues
 MITVLIDGQS GAGKTTLAGE LAARTGFQLV HLDDFYPGWT GLEAASEIVA RHVLADNPG
 FFTWDWHNNC QGDWIKLEPG RSLIEGSGS ITAATKRKAS LLGELVTVRI TGPEALRKQR
 ALNRDPDYAP FWKVAQQEQ RHFSLGVEVD HEIVLGSDEA SGRPEEIYDS LGTAQSS

> aaRXA00830 (1-723, translated) 241 residues
 MENPGDLGAM PQYGEEHISM LITAVVLAIL VVPIARRFNF APAFGWVLLI ATLLSNLWNF
 MPGYITLDQS WPFHFS DALR IIAAIALINR ARWAVSVTIL WGTINLMSL LTPDVQYLQV
 PWLEFLMYWF MHISVFLAAI ILIFAFGEKP GLSGVMSVA VAISWGIMCL MVNAFLGTNY
 GYLSTEPESA SILDLLGGWP FYIVAELVLL CAVWALWSYL IDKLPITYRP AYRPKTRKAA
 A

> aaRXA00831 (1-702, translated) 234 residues
 MSALETQLWQ DWSSVLIVVA HPDDPEYGLS AAVKEWTDAG VEVSYLLLTH GEAGIQGLDP
 KETGSLRAAE QRAACDVGV RNLTI LNHPD SMLVYNLVL R KDIAREIRIR KPNVAVVSNF
 DVEAYGGLNQ ADHRVAGLAA IDATRDANP WAQPELLQED LQPWGAEVII IAGHPEPTHT
 MDLAKDSVDA GVASLQAHKE YLAALPDPPK PEEFIPAFLE VEGGYAAAFR VFGR

> aaRXA00835 (1-690, translated) 230 residues
 FAPWALTPIL MLGGSYLCFE GAEKIWSLH RRIKGEQHST EPKSQESPKS EDQLVKSALT
 TDLILSAEIM VISLNQIADQ TIWMQAAVLF VVGIGITALV YGVVGVLVKM DDVGLTSLKR
 DSAGIQKFG R GLVKAMP IVL QVISVGVFA MLWVGGHIMV VGTEELGWEL PYHLVHGLES
 WANGIGGSAL GWVGNTFGSL VFGLIWGAI TVVSVIKKF IPQRAQNSSH

> aaRXA00836 (1-1671, translated) 557 residues
 MYTHSTGTPQ LDFDGDYIPL HLFSAQTAQ HFALERNVNH VLRAIVKPEQ GELIVEALLA
 PIESATKIGV WVQDEFLGVI AESQFLNSQ LSRI FASGHL ISSQLLLTPS KGSLASVLLP
 NLKFGILSND PPRADSHLLP LGRMWRVEPT VHALFEDFSL GSTILFGLRL DLEALIVSYN
 GIECGILNFD DASALSSAVK FSNANGLTPT VLGHVVRENG ETSFEIDVLP LELWSKKQHR
 LEVLKIPRLI PKEADSQNYV KATALLSDEI LRPQTLSKKA LSLSDTAVKY SPHVACGVGM
 FSLFAVIPFD KLS DHSAMLL AVISLMLFVL ALVILFKRIQ STNTQRWNLA SSVGLLATLP
 I IIFLVADTL IPQGSLENHA QPDVQVTTLA NRRPSSPTSL DSLGALNSPS SPNSPSSML
 QNSEMFASPP IASGQSPVST FRWLDRSIL PLTRENSASE SAVTALGPSI VQPASESITT
 PAQTSQSRHA IDDGDDSKTS TGRPAPTNS PIIALPPTWI IGPEDPESTD PTAPTEPTTEP
 SEPVATDEPS ETSEQTS

> aaRXA00840 (1-714, translated) 238 residues
 VTKTLPRLLT VAAALAIALP ATPVASAVTP VEQAFNASSN LSSGLPVDQW GRPNEQFRQQ
 IEQAVNQPVW PQEIKNIVSQ AMGFITGDGS EGGDIEIPDN APRIAQFFWP TRSENCINGN
 SAAVGSFAV PGPADLPLPG AGVGQTSFVF TALGTGPLAE QQTAMTVQW ANLSNFTHGT
 TTLSNTGINP DGPSTISGVA DTGRGIIVAS MSGGLTTSTE NGSANCNFIP TAVVFDVR

> aaRXA00841 (1-537, translated) 179 residues
 MTDLHPVKQE IFNTAESINT DPKGFLREVD TFKVTDGFLY MARGANHPKF GYLESWLLPE
 LGLRANIFHF RKGVD ERQDY YIDVAEIRVE DNIWTT RDLY VDLISVCGEPTVTM DIDE LA
 AATSAGLITA DDAERAIDAT LNAVEGITRH GDDPMQWLRS KGIELTWADA SQVELVPAE

> aaRXA00846 (1-387, translated) 129 residues
 MLKNDLSGAR VVAVHAHPDD EAITTGVL A DLAARGADVT VITCTLGEQG EVIGETFAQL
 VNGDADQLGG FRIHELYASL EILGVRGIHL GGAGCWRDSG MVGDPANEHP RAFIHSGDRA
 VEQLKELLA

> aaRXA00853 (1-603, translated) 201 residues
 MPTSSSPATV TPLKKQSSRK QLQDIALIAV FAALIIVLAF VSIPVGTAGV PIVLQNASIV
 LAGLILGGRR GFLTALLFLA LGLIGLPVLA GGRITLAALA GPTAGYIVGY LISPLVAGII
 AYLAPKKRGA GMFIVLGLAG LAGLITQYAC GIVGLVLRAG LSLSEATIAQ GAFVLPDLAK
 ITVMVIAAG VHAAPDIRK K

> aaRXA00854 (1-213, translated) 71 residues
 MRLSEFRQLI EDEFGEAKGE WIAHSHVIGA LGVTADVAVD TGVDLRDVWE QLCIDFSVPE

ERRLGKDEPG F

> aaRXA00855 (1-285, translated) 95 residues

MTYFAVLYTY NPDSEKVAEV RTVHREFIAN LHAEGKIVGS GPFVDGDGGA LIVIKLEEGS
NLVDAETLMN NDFFHVENVL DNRVIRSWNP VTKDF

> aaRXA00861 (1-426, translated) 142 residues

MAPHKVMLIT TGTQGEPMMA LSRMARREHR QITVRDGDLI ILSSSLVPGN EEAVFGVINM
LAQIGATVVT GRDAKVHTSG HGYSGELLFL YNAARPKNAM PVHGEWRHLR ANKELAISTG
VNRDNVLAQ NGVVVDMVNG RA

> aaRXA00862 (1-564, translated) 188 residues

VTETETANPV TTRTPSDAA PSPTTSEPTG SESTNSPSPT ALPPLGSPSM DQKQQAQVGD
SDMSIAGIRV AEHETFTRVV FDIAGNGQPG WWVDWATDPI QQASGLPVEM AGDSFLNVNI
QGTGYPDQVV VPGIDTGSYP GAGIVEDINF TSIFEARSQV LIGVSGQPRN YSVSLLQEPT
RLVVDIVH

> aaRXA00869 (1-792, translated) 264 residues

LFIVAADHPA RGALAVGDNE PAMANRYELL ERMAIALSRP GVDGVLGTPD IIDDLAALGL
LDDKIVVGS NRGGLRGASF EMDDRYTGYN VSSMVDRGVD FAKTLVRINL SDAGTAPTLE
ATAHAVNEAA AAQLPIMLEP FMSNWVNGKV VNDLSTDAVI QSVIAAAGLG NDSSYTWMKL
PVVEEMERVM ESTTMTPTLL GEGGNDPDA TFASWEHALT LPGVRGLTVG RTLLYPQDGD
VAAAVDTAAR LVHTDIQQFT SQSI

> aaRXA00874 (1-1089, translated) 363 residues

MSIGQHIITE RFGYAKSHTI DNVDIVLSRE CGENTLAVVR INNALYQLLV NDDGKDVIND
HVEEVGASFG AWTGSSAFPI GPFTPLGTEQ SNSSFITADN KAIVKYFRKL ESGQNPDEL
ISKISSCPNI APILGFSSAE ISGANYTLVM AQQYVPGLDG WSHALTTTSG SFAEDAEGIG
EATRNVTAL ASAFPTRVVP VEALADALTT RLNELISQAP EIARFKEAAI DLYQSLEGEA
HIQRIHGLH LGQLIKTPER YILIDFEGEP ARPLNQRRLP DSPLKDLAGI IRSIDYAAFY
DGEHTQWANE ATALFLDGYG SIEDQELLNA YILDKALYEV AYEINNRPDW VKIPLEAVER
LLD

> aaRXA00876 (1-1755, translated) 585 residues

MTLKIDPSSI SSAVSRNLNEL QHQAITASQV GMKSTILSAF SPVSGLDQLG SGHGNVINGG
AGAANSVLNS YAEQIEWLSA ALQASGAALT GQDELFGARM DVADTGGRVV EESVMFPARP
APRFESFVN PPAVSPSLSL DALCSQFSGT NSGAVLEAQQ SWGSMASAI NVSASLSSIA
GEILAENS GEILAEENIN EVAAAGATFA ANAKMMGASV GTLNRIYMGH RMQVMAATS
IKAILDPVQR LAAERAFLAS FQATFQADV L TGMPPVSNLM QMKGANGSAG EIALGMDEIA
GSGQAWSAAG LTPSGAAQGG VANAGSIAPD AAVQGAAGQS GVGSFGTVTD QLDGINIGDM
LTSASAGQS LANGLAMPTS TPNSASGAIP SSMSAASPLG AFGSGAGLGA QGGSIGSSAP
GAISSRAAGS AGGSVPGMTG GPGAPGITS SLMGARTHGA SSAGAVAPMM GGAGMSGGV
VGAGGTGSQS KYARQTGSSV GSSSQSGSGL GMVSGSGSKP SISNFGRGMM PMMPMPMGG
AGGGQKNTGK VKTTSVAVEE DRNLAALLGD RGPVVPVIG DWVRG

> aaRXA00881 (1-378, translated) 126 residues

MSNTETQFDW DGSTWTRTEV GEAPTRFAVG VMEDFAYIAA TGTGDGDEEFF TLGSNPGLTF
GDPEWLFQAD NPQYVVECIG QQGTEPAALK VVDKYLRLS DEESRGEPTL ILNELVSAME
LPALPW

> aaRXA00882 (1-678, translated) 226 residues

MSSTTAQLRH RELTQEIYNI GDEVAEYIEH IMEAVSDWDL ELVEDCLAEF DEIITEARDD
SRTVVAELSG LRHALTTGIR QGTVSARATV EVDVDKPERL TASELERDFD IDAGLVDVRD
LSTALNARTD AVVKRLEATV EWLAEATDKV ANDLDSLSLP LLYGRVAAVI ESATSAWINA
VGTANPAYVR TMRGSNPPRF LLERARIDAV VARVADKLAQ KRNAV

> aaRXA00883 (1-519, translated) 173 residues

VQGMKRKMVA AALATALLFG AAPAHASELV EPTTVAESVA LDPNKAINIL TPDWEDIEA
KPGDIVHIPY QGTRNYEDLT VEVAKPFEDF QILVGLDNSI VIAVPKNLSG AASVAPVFTV
SDKNGEIDSF TIKVSVEPRR QSDEEKRSAL FDISELAYR MPHLPFVSEL LKY

> aaRXA00887 (1-723, translated) 241 residues

MSLPVFISDS AAGPGETIEL AGPEGRHAVT VKRIQVGEKI SLIDGRGTAR TCTVTALQGK
 DRLNAVVDLV EEIPAPNPQV TIVQAIPKSE RSELTIDLLT QAGADRIVAW QASRCVAKWG
 GKEAKSLAKW QVAAEAAAKQ SRRATIEPEL GVVGEEGVEK LIDESDLAII LHEEATAAIR
 ELEFGSNVVV IIGPEGGVAP SEISRFDVAG AHTVKLGPEV LRTASAGMVA LAAIGVLSDR
 W

> aaRXA00889 (1-588, translated) 196 residues

MSIEVFNESE YDGVNEEMLI DVLSFALGEM DIHPDAEASI HIVDVDTIAD LHVKNWLDLEG
 PTDVMSFPM D ELTPGYSRPD GATPGPAMLG DIVLCPEFAA KQATKAGHDL AHELLALLTVH
 GSLHLLGYDH VDPAEEREMF ALQNELLDADW YDNVEARGVT YQPKPSGAGA FPTAADRLLEL
 DEKMEADDSG FGGVES

> aaRXA00893 (1-597, translated) 199 residues

MVESQHIIIFI PESQQTPEDEF TEVVNEIPAG IKPRIVPWSG SVSAGVQAVE SILDREEIRR
 VILVGAGTGA GVALEIAKNQ PRRVERLVLD SPLVTFDEKQ LKGMSTALKM MPGFFFRKKN
 KKDLLQQVEE ARTAVPMGFS EITMPTLIIR GSAKAGIDS DLEKQIPSAR ATTIIGANWL
 TYTTHGRQTG AAIAEFLAQ

> aaRXA00895 (1-591, translated) 197 residues

MRGLAMILIA VAVLLAAWAL WSMQKDDTS TTSAGQTQST ETNAGTIAES SGSSDSEQAS
 AEPGTSEETS AEQPAADGEA ANAAGAAAAG GASSANGNST PVNTLYVLNN STVPQLAARV
 ADSLSGDYQK VESGNLPDTI IPQNTVYFTA GNTAEKAAR ELADRVSGVA MERSDALPTE
 TEGKDALVLV LVQDVAL

> aaRXA00903 (1-633, translated) 211 residues

MGNPLAVIAD ADDLSAEQMA RIARWNLSE TTFLKPTQE GADYRVRIFT PTGELPFAGH
 PTLGTAHVFR ELHGEQGTQL VQECVAGLVA VRAIDGPASG LAFQAPPTLK DGPLDASDL
 AACEALGISP DFIRAHQWVD NGPGWAVVEL PSAQHVLDLE PDFSAHPTLK LGVIGAYPEG
 APHAFEVRAF AQGIGEDPVT GSLNAFIAQW L

> aaRXA00908 (1-558, translated) 186 residues

MSLYTRTQNT RHSTIIIEFRR EQTRNHTMEP IQSEPRIYAD DPFRRARFGHQ LPRGLREEAR
 GMEWRTFTNT YAPTGNLRIS NLESEARRGG MFHFNATLIN NCQGERTTTD AHIMATGPVS
 ACTNLLADAG RRVEILEFHQ FDIFEATVTF IYTCNNVSRT WAMGFGGTPE QSAASAMSSA
 AHLLYG

> aaRXA00915 (1-510, translated) 170 residues

MSAAYSQDTI LTVFLGRGLT AEGIRQTLED FAETGLVRNL VWIDADSFHE SSSEVTHLAT
 NQDGLPELQR RPFNELVSRS RTTKLHIGVI NVIDGSEGML HAEELNPLVG IIDSVCSSHHQ
 IHRSNMVIGA VAATLDEELP ILRGYVNLML APEDSHSPGT ATVTYRHGFS

> aaRXA00916 (1-3591, translated) 1197 residues

MKKVLVVGCG GSGAKTLAYM MDQLKTTLAD SLPERYPNPK EAKLPGAWQF VSVDPVTSPE
 SPGPNLPNPV EAGGRYISCG SSDRYATVDT AVSNQLSSRG ALGGVSSWAL RNPDESSTPI
 SKGAGQYRSI GRMLILSRLQ EIQAE LRKSW DVLFSGETER ELADLRSAFY GTSVSSGETS
 KEQPIIFGVS SMAGGAGASM ALDICRLLTG LEGNAVGLSS LFMVTPDIFS QLSPDQVAGT
 NPNALAMFAE LAAAQMGAAE EEDARLFNAL GVSVDGDSIP VGRIFPVGIR SGENGALLGD
 GKPDTVYRAL GRGLAALMAD EVSMDNFEQF TLGNRGGGSA DQSKYAWGAQ EAKNIPWGSY
 GYSQLSMGRD RYAEYAAQRL ARSAVDRLK GHFDPSNDAA SDQQLQKRLE NNRPSLMGNL
 SDVLPVNAPA GDWIFHSFNQ MIENWTQRMK AIIKSQIPAA NGQRGSEWLG DVQRAFQSSS
 QMIDNDSRHE LYMGVADWAS ADVLQRRVVE LLRDEIAKLG VPGVSVIES LSATIQNQLI
 GQLSDLANNR APEAVQLDDV SRSELDNSKG RIDSDSYIQ EIVSRSTGQL HTRAVQYIAD
 HMASVLDLDF KNFIYPLQRT IQREHHSLEK DYQLTNDVNL GISQLKTNVP ALWPDESQTT
 VPSRFSQAAN EVFLTDVASF PEQFQAHVRS STDDINEQND YSSALQEAST RVVSGVWESK
 SGSEKAPRDL IRLIDVWVAR DLTRDPGSG SLRDPKQARF ELKIDTGEVL ERSRQYIRRP
 GFSFQQFIAS SLREFITAPG LADHERRARR QQVLSKFSEA MTYALPLAQI NPQLVRALYG
 DEVRYNFNFS RIPFAGDELG SSLEQAVRDY PNHRPADISK PLGKALVSQG EERSIDIFGS
 YPNYAPIVFD SLLPPIEKQW RQITGDRTEF WHGRRTPLT AALPMTDLER NAMVKGWYIG
 RLVGRVFFPA TLDADTTPV QIYDEKSDSW INFSTPMLTP VSRFRGSLDW LPNLLSASL
 AWARAGERPV FESVEPYIQL RQLWDDAASP SLPGRTRTGE KLLHDWLFDG NRMAGNVLQI

PGTEAGVTPA ARFEAAKNFL QRQNEISQNY VPSDKLRQGR LFTTADRPFG DVKDRELAQ
IPVFADLAAD VFDGTQEIID ILEKCLAAGP PSAQVFDMMV ARRDVSSGPS LPGEGEF

> aaRXA00917 (1-1383, translated) 461 residues

QLNMQLVGRD GQPRILEGSA LVDLGFTRAD TGEFAPLAQG IDISGGELSF PLDTISQLPA
IGTVEARTTI TTAGVDDLPG TTLSPIILNTT RITITQRDMP QLPASVRFTA DEDVVTVDIP
ITGPGKVWIA PGTQLSGVLP DGVDGIAASS TFDSPDNALV LGLDEQGTIP VELTVSDLRD
GLVNGSIPLQ ISNAEGANET SVDLPTEGTL SVPINASTFA LAFILALVLS LLIPLLLIYI
VRFLSAKVPS SAMSGVRIPV EFSGEALRYA GSTMPDLASQ TTATKQVVVH GDTFNVEGHK
LKVQRFQLNP IASPAVIVQT DPSISFDGKQ KGTQAKLPLA VQGSWFLTAS GADPSKMELI
ALTNLPLEQG QIDRMIAGIT SKAPDRAREL QKLLDDAATS QPAKVPPRAP AAQGHVEKQA
PSFGTSGSGG FGSSNGGGFG SGSGSNDTNG GFGSSGGFGA R

> aaRXA00921 (1-1899, translated) 633 residues

VEGGTWSAQK TKEDLQFIAE VAPTHIETVT PFDDFISSED IDALPRRFY RPLAGRSLIM
QSVPAKDAT GRPGNVFTHA VFDGDLESPL ESVPISLYR SPDLLTPFRA AAVNAAELPL
DAGEPRIGPI TDLSLSWMMI DSMFGDRRQQ FYQLQDALQA GDKATVLVLN STNEAAYWLQ
ALSSTLTNE ARRLHFFSTF ERAATLPAPD KSMEARSLFV VPGIDRELLA EHSIGVIIDP
EIPQSQFPG QGSWSRMTEG LFSDFDADE LVAGLIRANE NLDNSQKELA QFGDGLARFI
RNGRFSGTHP LRVLADQHMF GKVPDKPAPK VEPVAPAPNP NAIWARASEV VHNPRRASES
QDWPSLRRLP DSRRIINMS EQAINIEKL HDSPAQDLVA YLDFLLKTEL ATSINASDPF
FRSSFSDFPA MDNWRHIKFT EDAHPRRLREL LVDAERDARN RAPAAIVLDH IVPNFSRDRS
LPDIEDWTRS DEAQQIFAGI IAGASVQTGR SHFMWDLRA YFGVALIGDE DTYRAFTTLT
VDSVLSFVQL TLQEGRTEDI RFEKYGEQI AREDLPSILT NARAVQQYLG YIDQDIINKK
VSRSDVNQI FTEMARAIIR AISRNNIGKD MRS

> aaRXA00926 (1-363, translated) 121 residues

MDIVFLIILL AIFIVPTFLM SRRQRARMTE IQKLQDSVVP GDRIVTTAGQ HATVISTTAE
TVDLIAPGM ISTFEKLAIV RVLSKANEPQ MLDEPTLFDQ PEDDQPNDFG DGRDTGHPEN
R

> aaRXA00930 (1-753, translated) 251 residues

MSGHSHWATT KHKKAANDAK RGKEFAKLIK NIEVAARTGG GDPSANPTLD DMIKKAKKAS
VPNDNIERAR KRGSAGEEAGG ADWMNIMYEG YGPNGVAMLI ECLTDNRNRA ATEVRTAMTK
NGGNLGESEGS VSYMFTRTGV VTVQKGDLE DDVLMVLEA GAEEVNDNGD LFEVTCAPTD
IQAVRDALVE AGIEVEDSES DFRASVQVPL DADGARKIFK LVDALEDSDD VQNVYTNIDL
SDEVLTELEN D

> aaRXA00932 (1-474, translated) 158 residues

MTPQKLHRFA ALLEMGTWTL LIIGMILKYS GVTDAVTPIA GGIHGFGLC FAATITVWI
NNKWTFPQGI AGLIVSVIPW AALPFALWAD KKGLVAGGWR FSDPSEKPHF FFDKILAQLV
RHPIRSILIL LVIIAVVFSI LLAMGPPYDP DAINTVD

> aaRXA00933 (1-462, translated) 154 residues

MTLVYLLIIV VVTATVLWAY FTAQRLNRLH IRTDSARQAL QAALDRRAAL VGALLPDAAE
ASKRAEAIPL EYSRFSQAR AEREISELIL KQKTLPSI VDAATRVELA HRFYNEAVSD
TRDLRTRLMV RSFRLGGTAP LPEYFELDT DLT

> aaRXA00940 (1-396, translated) 132 residues

VILVLEAES MRGYQIITTI SEQTEGNWTP SPGTIYPTLS MLEDEGLISI SHEMGRMKAR
LTEEGAQEVK KNKDAWGSIL EAYRNPESRE VRFVFNIRSEF HKVREAAKAA PDDKAEQIIE
ILRAADDIK RL

> aaRXA00943 (1-507, translated) 169 residues

KPGVKWRATN ATKRGKKQLQ QALSTKSETE KFGEKASDWF NDTSDKVTEY AYTAQDFVGE
NKDDWIKSAT ETAHKVADTV SDYAHKATSY LEENSGDWLE AAQANAKTAR KSAVKAAGKA
HEKANFALQV AEETSGRANK KATKSYDKLQ KQADKAIDRA QKKLKGIEL

> aaRXA00946 (1-774, translated) 258 residues

MTHTLQATNP LDQTAWHAWH FSRNKEAISR TGATSLSATE WISATTLKDA HTFPSLPGRW
YKRGGGVUGA HLPPAFATTG TVQLRPGELL IAEDFTLTVI ERLGQFALQV FDARNPKRFE

FHSIAAFPPS EEWRIEARFF PEPDTVNTAA ADGVIVATPT AGWVHFLKGR LDYRLRVTVQ
 KNNLRALFSD NSSTLGVYQH RFVDIPRPDA EGNTIIDFNR AYLPPKALNR KFLCPSPSLN
 NHLNLTVEAG EKWVVVAGG

> aaRxA00949 (1-648, translated) 216 residues
 MKVFIIGAAG GIGNRLSSLL HARGDAVSGM HRNLEQASKI TDTGATAVLG DLIHNSTEEL
 AELFRGHDAI VFSAGAHGTG QENTTLIDGA GLRKAADAAS AANVSRFILV SAFPESSRGE
 NTFENFEHYM KVKKSADVYL SHTDLDWVIV RPGVLQDEAG DGLVTAGLAI NYGNVARDNV
 AAFIDEALHQ PQLSKIIVEL TDGSTPVAEA VERLIK

> aaRxA00959 (1-327, translated) 109 residues
 MTVIGIILGS LFGVLAVLLI VVGALGWAAK LPGNPVVGIR VPEVRKSQEL WDMAHRVAGP
 LWVLSGVSVFV IASLVAFVAS GMMWLVALG VEAIAFIGM GAGMAAHTG

> aaRxA00963 (1-438, translated) 146 residues
 MRLATIRTNQ TTIAARVESE NTATTIEGFA NVGELLQESN WRELAENAAG EAVTFENKEL
 DAVVPAPKKI VCVGLNYANH IKEMGRDLPD TPTLFVKFPD ALIGPFDDVV VPEWANKALD
 WEGEMAVIIG KRARRVKQAD AAERYA

> aaRxA00969 (1-147, translated) 49 residues
 IRQEERDDDA RLIVVTHSAL ESDLSRTVEL LKAKPVVKAI NSVIRLERD

> aaRxA00971 (1-273, translated) 91 residues
 NHAEEELDE ALSPLINRLR EMGFDPTE EANSALHSC PFVNDKRPS AFVCAIHAGF
 IQESLGENNR IQLELKPLNA PGTCKVHVFS E

> aaRxA00973 (1-603, translated) 201 residues
 MNHSDDDRMQ KWFQIRRELG KEIVKQLQKD LPAVASDIGS MVYSSDQVPL GNATLTAYGD
 IGNRVASAAT SARYNVEELL DAIENARFAI WVPNYDNSYY LSGEEGADEF QTYLIKDASR
 FLESSGNTPP ENPQYSOSKL TFASELLPFY TAFNNSTYPL LHACVQGEPT EVDLYFYELE
 QALKEKETA QLSSGSSFGS S

> aaRxA00978 (1-615, translated) 205 residues
 MSRSPLTKGL NQLEHLELDK SLTAWSWAED DPLYLAGENL NGSYLIVAGR VRVSRDTIDG
 KELTVDIATP GDVIGAITDE PQPAVDSAWA IETTCALFLP ATALATVIEQ HPSFALAMIR
 MQQQRLATAR DHEINLTTTT VEQRVAIAVR TLGRKIGQRR PDGILLIQVR IRREDVAGLA
 GTTVESTSRV LARLRKEGVI DSGRE

> aaRxA00986 (1-342, translated) 114 residues
 MTLKDKYDTE VAVSNNQDKH QFEVSYPEDA VTAGFAAYLD KGDSRIFYHT VVGDEFGGKG
 LASILVSEAL KATKEAGLTV VPVCPVVKGF VEKNAFEGYR KPNHEDMELV KSQM

> aaRxA00987 (1-465, translated) 155 residues
 MPKSLTFEDS INIAAPINQV YALVSDITRT GEWSPVCEKC WDEDEGPVV GAHFTGRNVT
 PERTWETRSE VIVAEPNRCF GWSVTDGNVK WIYSMEPLEE GTVLTESWEF TPKGQRRFFHD
 KFGDKSIEEI EKRLAAITG IPETLVAIQR ILEVE

> aaRxA00988 (1-423, translated) 141 residues
 MSKREESIEY GPLKGHDPL KDPMKGIRGV MAGTLVMEAI TLGLVLTIVL RVDDGIYWT
 FNWVYSAVA IAHFVAAFLQ RFSWSIPMNI VLQVLALAGF FVHPAMGFAA IIFIIAWAYL
 FYLRNLIDR MKRGLLTQH S

> aaRxA01005 (1-846, translated) 282 residues
 MELARAHAR ADSFTKDHLK RQAHIKHPV FDFLFEYYPV RVAHLKTWHP GIGVFLEGT
 PHATMRDFLL VDASLHHAAG VQLDLASYMQ RRGSSVRYIH ELLSATRDNH AQFDCFLGHE
 WAMVYKSNL RHDPLRLTP SETDRVVESH NIKCTHFDAY RFTTPAIPPL NLTVLTREDQ
 PRNDQCGCLH ATMDLYKWSA KLGPLVPGDL FLDAFELARD TRILDMEASP YDVRGYGFGY
 VPIETAEGKA EYVSRQRELS ERAKPIRDRL VSITKQALQA SI

> aaRxA01007 (1-1707, translated) 569 residues
 VFKKHRHGLG SPETKPRSIT RFFFTAAAAAT LAGLAVLSGC TAQPSQAEDN TLTYLEPQFF

RTLYPPSAGF YPNGSVVNNI ADRLLYQDPE TLELKPWIAT ELPEVNEDAT EFTFNIRTDV
 TYSDGTPHTA ENVVKNFDLY GLGDQDRRLT ISEQITNYDH GEVVDVDETVR FHFSEPAPGF
 AQATSSFNAG LYADSTLEFA NEDFAPGNAQ NVIGSGPFVI TDETLGTNLT LTAREDYDWA
 PPSREHQGRA KLDVANYVLA GEESVRIGAI VAGQGDIARQ IEAPVEAHLK DAGIPIISAA
 TNGVNNNSFN RFKNELLSDI RVRQALIHAI DREKIMRVLF SDSYPLATSV LAQNALGYKE
 QVDAYVYDLD KATALLEDEAG WTLDSDGMRR KDGELELTF NEALPQPRSR EVVTMVQEQL
 GDLGIKVNLN PGDQAAQDAD SKDLNKIQVR HTMVGRADYD VLKSQLYSTN RNELLNMTVE
 GETADIGDPH LEELLMIAIS SPREEDRAAA SAAAQDYITE QAYVLPLEEE PVVYGVQPYV
 KGFSPEVIGR PSFYETYIDH SSDHSSEED

> aaRXA01008 (1-1941, translated) 647 residues

VSTTDKQVAI VGVGPRGISI LERIAAALNT VSRPKQGLTI HLIEDAQMGGA GNVWRTDQTR
 TLMNNTLAGA VTLFTEPGST VSAPVVEGFL QFDWIRLLRG DEDLSGIPTK AIELFRTPYP
 AASVAEDFKE ELAATVIQSN PSRALYGAYL RWAFDVALQL LPQWVKVEQH HARAIGIRED
 GDRDVITLDN SEMISADSTV LAVGWQTPAP NAEELSIAAA LEENPDVWV KPGNPVEQDA
 SLIPAGEQVL VRGLGMGFFD IMALTTIDRG GIFHEDPSTR SGLRYEASGE EPHFVISSGR
 GYPYLPKSDY KSLPPGAKLA RLKAVIAAIN AQNRGVASIN YDAEVWPAVA RDAYEAYYET
 LDRVSPESIR TGLDKIVEII DEVVDVKLPK ALAAHTDDVF DLHAWEFPLA GINESVEALT
 ARIADGMARD IRHAVTAWDS PLKSALWSIS AARKPSSILG AEGRLTFESR RNRFAAVMAI
 GQMVGSGPPL FRTRELLALV DAGLAHFAGA RPRLSVSDGQ WQISSPTTGD TPLRSKVLVD
 AWMHNPVRR NADPLALSLE DADRVRFND YSVDGTAAPT GSPEVDPATR LLVHPNGNLD
 PRVHLIGIPT YGQLADTTIS PMPGTNPLML QETDKTAVHV LKQLGLI

> aaRXA01011 (1-1233, translated) 411 residues

MSDLIDMLVG EDLPQLRDNR PQARDNAQKS FEALLEPVNP GTFSFGERYA VATYVAGLHQ
 FAPAVDLYQD LLLDDAPTTL ANAVSDAIDE GLSAGPYGTY REPGLESESE PGGSVRNDAA
 KLGERLAAAF DYAHLLVFHP RDSRPEVLGR LSGAGWSADD TVTLAQLVSF LAFQLRVAYG
 LRTLKGEDIQ VKAPRLSIPE AKWELSNNGF EISTYEELNR PEAFFVNHSLG WKPWVPPVAK
 ADLTEEQLDL LIQPERADMP YFRLLARDPA ALKARTLTDL DIFFTNDGEG LGRAERELGA
 TVTSRYNGCV YCASVHAGRA QEESGRADDV NALLASIDSD LGSDQWNVIR DAARALSSTP
 AAFNQGCITK LRGVGFSDLQ IVDLINSVAF FNWANRLMLS LGEPEVPKRF L

> aaRXA01016 (1-648, translated) 216 residues

LLPYAIVGLV ILLPSSWLPR WAVAVLGEVS LVPVAVFVGGG FLLIPSMFLI GSALVRYGVV
 DRAENAPRAM GVFFAVSAAI AIPTLIIQAR DITSSGFSIV STVAGLALGG VYISLVLLAL
 HTPIRGALAA VFAPLGRMAL TNYIGATILM LIGGLIVDLP HSTSWTATVL LAAGILIIQE
 LLSALWLRHY TQGPLGYLWR WVTWGSRSFP LTRSAS

> aaRXA01017 (1-609, translated) 203 residues

MAQKVTFWFD TTCPCFWTS RWIKEVEQVR DIEIQWVPM LVLNEGRDL PEDYKERMKA
 AWGPARVFAA VATDHADKLG DLYTAMGTRI HNDGRGPIEG SFNDVIAEAL EEVGLDAALG
 EVADTTWDD ALRAFHQTAM DEVGNDVGTP VVKLGDTAFF GPVLTRIPRG EEAGEIFDAS
 FKLASYPHFF EIKRSRTENP QFD

> aaRXA01021 (1-522, translated) 174 residues

MSSSESSRSE GSQPAPSVQP ERRADSTGAP AAASKEASQQ MDAAGVLEWA RTAVEQLSER
 RAEINALNVF PVPDADTGSN MTYTMTAALD EALKLGELGD VARITEALAV GSVRGARGNS
 GVVLSQLVRA IAQAAADGVI DGHTIQEALS IARSLVDRAI TDPVEGTVVT VLRS

> aaRXA01023 (1-951, translated) 317 residues

PANGGINKTP MIIALVLSIV LVLAVLFGAR VLLGPAGQQQ IAMSGLPAPD AESAECALL
 EDLPGEAFGH TRAEIMDPVP PGAAAWSTSD LERVTLRCGV DMPFQYALA NTVDVDGTTW
 LPVSDMTPGS SLETWYSVNR FPVVAITADD ISTDSADNPV DPFSASVDKL EKRDOGPFDA
 PLTGLSSAGT TCTSLFDALP RQLEVGGDDG TTYERIEEDR MQAAGYSDDA VAWDTPGLEP
 IVIRCGVEPS ENYAAGAMLQ QIDDIPWFED TILASGTTSS TWYALGREID IAVSLPQAAS
 SSLITISGFI EDTVPAE

> aaRXA01028 (1-624, translated) 208 residues

FYQNILASSR GSNTFLFSVP YIPATEGEET HPATDTSTIA TPTLSFDAYG NKAEMPTQS
 TVDKRVPSLL QYYTRTFHVR QDTQQAVFDV IGANPVLIAA AKAAISPAS ADSRRKKGLA
 STNADPVAKH VLEIAGADVE SLRHEKDLKV TKHTGQDPAL PVVFNQTIW HNPNDVINA

LLGAIDQDAY IDMAISSYNK SWHNIIPA

> aaRXA01029 (1-489, translated) 163 residues
MLQTISFKKL NLLTTLKRKG ELVIMITRHD VPYIIAPPVY AIFASLMTTP PWFYRTTYTI
DGFDFKISWV YTITIYISLM ILIIGFYQAN MRKACPYEED PLVDIWHKVV STALFILPIV
LSIAVYSLIT QRGFDWYVMV FILPVGLMIA YGFFKPCDCD KHR

> aaRXA01031 (1-666, translated) 222 residues
MKLLQYAGGA VYVDPEDSAQ SQDLDASTAR DVIDATNTAM TTITSRPTMI VHLHKVRKVI
EILCNPALGG EPVNIDQDET GKQVYTPTPT LVAYRFISDK EILLHYLAQA GVQGVVEFDG
SPDMLSRWNA GRIPVLLQLP ASAGHGLNFQ HGGHRLVWYN LPDNNEHYMQ ANARLHRIGQ
KNPVTIHRRI TADTYDANMP AILAGKANRQ QRLIDAVRRD PV

> aaRXA01032 (1-375, translated) 125 residues
MSDHDAPQTP IPKGFQQID HQDLRLGTQR PETFAALRDI LLDPAYTAIV HDRNRYGVVT
FDTNSAFFSG SGGDNLADV LINCWDRMTD YRAEYVMT HKYTKESFTY IEGDVKRGDL
IPPNN

> aaRXA01033 (1-336, translated) 112 residues
MTQIAMYLAG PMTGIPEYNY PTFHAAANKF RAAGYTVLSP AEDEYESQLT APLPENAEHK
YDHYLRLGIE KLLKADAVHM LQGWQSSAGA TLEHDIAQKL RLAIITYEPP AS

> aaRXA01034 (1-354, translated) 118 residues
MDMAIIQSVE YTSDVSHERI TNVSVGVVY EGKQYVVDLN GDDIDTELDI ITLKEVIKIG
REESARQIRR GSVDAELHRK ARLWAIDNDM AVQQRGIVPQ EIDAYKEYC EKEGIPFE

> aaRXA01035 (1-606, translated) 202 residues
VLIRIAEHQGL RHVHSPYSK AFAARARKLN GLWSPETKTW HFSPDKEQPV RRALKDVYGW
DEFTTPELCT VQLTVTPEAV LNKHTLTIAQ VTLLSRLRRN YSVWLGDNRV IISGNFPEAA
GSPQYPLIMG VKAQPVVIHV QEFPVDAVST IPPRFNPVI TAPPSIDIAA LRAEREQLTR
RISEIDKKIA RAVHPTIQTE AA

> aaRXA01036 (1-453, translated) 151 residues
MHTVGKLDL DLRKLTNTDV LDLINALFGT TVTSADDEAA DFIDSDPQFA VLVELAYHDC
ARRAAMGLSR VQQLIYDNAA KSTYYRSVAA RHRKHIRELH EQTQRDGIHF DNPLSRAVIN
DLMSMNRAR LNRIASWKS GQRYLNPTI S

> aaRXA01037 (1-528, translated) 176 residues
MTTSSPLKSK NSLNGAQTTF VRNCVADGPT EVKATIDARG GIEQLRDNEI SQLPDKLWFN
SATSASNDEF TTDNIRLGLL YNMALNKASA HRYELAAWY AIVSPQPSQE ASHKRIASWH
LTQLHALVTI SRTLGVIIIPG DEIDALAQSM ENARQVGTE WSTVTMRTYV TNRKAS

> aaRXA01038 (1-747, translated) 249 residues
MTRDIFHEAA KLIHLGWRD AFPALQRTDP APHAVPIRA FDLKAGAVIT DENRSNAYIY
DTLVITQPYK HELPHQNTHP FEWALEQIAT LDPAFSIKLD RSVTVPEIGL YARTLHDLNT
RHQDFLAQRN AMLLVVARRG VDPKNIADVL GLTTNQHRI LSATPADSPT DLGVNPATTM
GDVVRFIKKR RTTMQLRGTA VRALLYHGLT PAVISRLSGM SRAGVINAAC AFPTTINHVK
KKRKQHFHV

> aaRXA01039 (1-576, translated) 192 residues
MAIKGAMPKN RVPGVAAGAF IAAAVIAGGS GVTFLAQGGG DVNTVAVVEP QDEVKNQVVT
ETEIVTKVHD PSSSDASDAD SNTGTAEAGD SDHKEPREHD SAQEPTAPTD PTLTITNGND
TPVSALDAVA GPARPGTVHV IENGETLSSI SQDSGVPVGL IIDRNKLVDP DLIYAGTPLA
IPTEQELAAA IQ

> aaRXA01040 (1-903, translated) 301 residues
MTYPVTPQPV QPAPVAEKIK ASSLKEGTQV FIKGRVNYSR IASFITGTER ENNRNDRLLHP
IEFDYTSLLT SHPEIIYGNP QQKTNEELFL EQRIFVGKKR PEEGPKFSID NKSNNRLPQVW
VPSTNADGTY EQLEGLELGL DAGLVNIIIL EFYKPRITQVN RGSRLNAVFL QEPRIYYTPG
YNADKLAALG IVLNAPPKDT IQLVPNEVAA QDQSTTDAS GLPLPGQGY APDQPYQAP
QYQQATPAAA PQQYQAPQPQ YQQSAPQAQ APAPVAQFQQ ASASGTCSAS TAAVSGTTSC

R

> aaRXA01041 (1-153, translated) 51 residues
VPQAPAVQAA PAVAQAPVAP VVDMTEPASP WDLPAAPSQP AQPAQGITYP A

> aaRXA01042 (1-1278, translated) 426 residues
MVNPFHTLDN SPFDPVAQFP AFYHNPLINH LGRRRAWTIS DINKRPINVO QMLTTATYGS
PVIHGARIED AATSLTLTDE LRTOIPTAAN NAFYLDVAVQD GCLILDIEKT CPPEVAATLL
TLSPTAFYTE VSMSGRGYHL VMPIPENFAA FPAVHNKPSI KHPKRWFEIL TSQWITFTRQ
PIPEHVLHHS ESANTSAPVW LNDQPLTWEN VFADLAKTVA PNLKTGAGLT ITPNALMPPD
LSDAERIRDD EVIDSTCRLF AEHYSKTLAD FYDDASRFEF SQIGVIINLL LPTMRMHPTT
ISLDKPINS D HIIRLLFAVA TRVITHRSKH DEERSGVPLY MYQVISCLDM REHPDNGDYR
VVPSRHNDRQ HSNPNSAHV HQQPQPQPSA ADSPHHYRAL PQENTVSEHS FKIYNPPATP
PLGGEN

> aaRXA01043 (1-573, translated) 191 residues
MLKFRIISTV TTGSQPTPRK SWSHPDTLL VTMVTAPSLC SAINVWNATE RIPAQKILNV
EEVHVLGECS DAIISTSLTK KDNPHALVPD DFDQIGDVFG YAQDNVAVFD VIVAALGGAG
YGLLPGLVMH HIDEHTVALV FDTDSPTGTH ILGERCVYSD IIMTDDKSA RGWGAVIAIA
RAIILKVEQI M

> aaRXA01044 (1-1257, translated) 419 residues
MSLYLDDTLS RIVELDLKDT RIVPFLAGEP GIGKTSFIYG IGERAGYKVF SISVNTLADK
GDLTGARTLQ DPADGKWKQM FFPHATFVEA NDYALANPNE TVVILLDEIN RTDSDVTSAS
MTISTERRVG TTDLAPNVRL AVTGNTLGNV THLDSASLTR FSLYEVKPSA ETFMNIMGGR
LNKYIRTVLT KYPEYIFMKP TTATALITG DDDDDHTTNA KQMMDFNAVL GSDQDMVQFT
APRTIEGLSV WLNNADDDFL RLLLQEKVDG LARSMSLLQA TLESHTGDTA FTAEVLESEM
NDLLSSASQA PSGPIKPFVY DRLAAPSNT VLEQEVHTLS LNDRADVLLF ALHDTVNNAA
PSIIAHLASE GVLDEL PKDR ISKIVSLGPV PTANYHALTR QDTTLTRNLG PAVLGFLS

> aaRXA01045 (1-1824, translated) 608 residues
MVTFSVANHA PHTFSPFDIE PPLTGNATD EHGYESVSVL EKLASNHLFN PINQHPVTI
TATENGSTVD LDAAALAQHL ALAITPDSML ANHQGYNRDM MGLLSQLTNH VGFDRRFIVD
QLFISQVLKA NRLPAPANNV IYTVPNVIP SAKDILSTTA KMNNPLTVTA SAPITVDDIH
TAYEVFFASL ASVFFPYTYG AVFLNNAEFV EFVDYLINEA TTLHSASLIS NNTFNRFQSM
RNISIDNLTA EFLLRKNEAE TTDDYSFPRV LVSLLSHWVK LNHDDARANN DAPTCALAPF
SVAQWIMPET IVFINAEAHA HASSQDIEKK WKEINAALTG SIRIMSPNAI SKLQSAQHLG
MQAQMQAMRA RKDHHNMQKR SSQENDFSKA LPSPQTIVLS VAEVLRKLTH VRQSHNPQKY
QKKSLTRASR RHPDNPVPG TIKSKLFYPD LHVYVDTSGS ISEESYRNSV VLLMQLATKL
DINLYFSTFS HVLSEEVLLP TKGKTPQQLA ALISAIPKVS GGTDYHQIWD YIQINPQRQE
RMNLVLTDFG FMPNRLNID HPSSIFYVPI LPDYGSWSMV RRDMSHFANE MVDVDPYIHS
RLLGVHKG

> aaRXA01046 (1-1779, translated) 593 residues
MIPFPQPQQ QSAPNDETRF IDLNERHKDD EPALFRDDVI DQTLAILISK NKNPALLVGP
AGTGKSRIAE DIARRLANDD VSIPDQLVGH RILDVSI AEL VAGAGVVGQL KKRILDLIKY
ATDPSNKVII FIDEIHQIAG DQSSHSGSQA KVAQILKPYL ARGDLRVIGA TTTQEARDFD
HDPALKRRFS RVNVDEFDRD QTLTILHAAR DGYLKHFNNA VTVSDDVLGY VYTYSQQFNP
GNTAQPDAA LTFDKALASL TMEKQRLINN HVIAPSLKFP VSERHIHNTA RKLAFGSQVP
ASINTDDARD KLETFLGQDH IIEPVLTAIK REQLGIFPRT KPLSWVFAGS SGVGKTEMAR
ILSRAINGGD PIIINGPEYI SPESITGLIG SSDGYIGSNS KRAKPLDPLI SNPRQVIVLD
EFEKSHPHFQ QLFMAALDTG TMAMANGTTL NFSQAI IAT TNAARDKIGR DSFGFSDNS
GVLGSAQAAT DPRAQERLKS LMSKD FLLNC STVSRISLPS TALMQAPTVR FWTISTSVAV
TPCCLATPHY AAQIPADIDS DTLDQLVETT FISDFGARPA ARTIEDHIAS LLM

> aaRXA01047 (1-474, translated) 158 residues
MIDTTANSTS GTLPTLTADQ AAFITGFCEA AIFTATVTID NEPIFLDEAF FLGQETYTDI
LMNQLRTNEA IVKDCLDFFL DNYTTMKNLI VDGLCPDWEH HGHD FLLTRD HHGAGFWDRG
YDEYGAQLTD NAEKYSENCL NFWIEPDS DP LIINFEYH

> aaRXA01058 (1-321, translated) 107 residues

MRKLRTASVA LLTAGALALT ATPAMAQSTT GSSASSQVGD ALGASDYERD IWGSSKDFDD
VTFPGSAWYG YTLAATAVAI SGLVYANLPA IEQAAAQAGI KLEIPRY

> aaRXA01062 (1-486, translated) 162 residues
MNEQEREALE DAALEEAALA DELAALEAEA GVQGSVEPYD YAADLDDDEDE FDEDPFAQDE
PRDAGPLGEL SSDNHVSEAV AEDTGTSTEE SAQEGSHEES VDNPRDFTGT ATAVRSFRPR
LPVPNALRPG PPIRTQPAVN TDIYDGGQEN TAGATAADVG AG

> aaRXA01063 (1-330, translated) 110 residues
MADEKKVHVR ATLRFDSDTH QRAIWADRK GISLSAYAE AIREKIDRDN GVHVIPNSLL
DNRMNQIIDQ LSSFGRELAN NTTVVTSGFN TIIGMTRGDS YLSDDLDDLG

> aaRXA01066 (1-726, translated) 242 residues
MRRDSFRDRA LVVKTYDFGE ADRIIVLLTR DHGIVRGVAK GVRRSKSRFG SRLQLFVELD
VQLYPGRKLS TISGADTVGY YASGIEDFT RYSCASAILE IATHIAGLEN DPHLFEETTR
ALKNIQDSPE PILNLDEFML RAMNHAGWAP SLFDCAACGR PGPHNAFHPG VGGAVCLYCR
PPGSAEVPPE ALHMMWLVAN GQAARIPREH PEQQTTHQL TTAHLQWHIE RKLPTLAVLD
QA

> aaRXA01068 (1-1071, translated) 357 residues
MPTNQPTPAQ IKRWRGYLAN EQAEAAAYRD LAKRREGEEER DILLALADAE HRHAAYWVEK
LGPDAENPPK ADVKTRLLGF LARFGSVFT LALMQSAETR SPYDDDADAS RQISADERIH
AEVVRGLASR GRERMSGNFR AAVFGINDGL VSNVALVMGV MATGVPAQIV LITGISGLLS
GALSMAAGEY ISVRSQTELL DASLPDPKAR EALHALDVES NELELVYRAR GMSDEARAK
ASQVFQRISD QKRISDNVLG STEIQSAGSA RSAATFSFLS FAIGAFLPIV PYVFGMEGLA
GAVVSLVLVG LSLMATGATT GLLSGKPPGI RAVRQLSIGY GAALVTYVLG LLFGMIL

> aaRXA01069 (1-603, translated) 201 residues
VNDLPNLPKL PFNWTWVLAT VATTVVLAGI GLYVYPSLP DPMPVHWNGS GEADNWTPKS
VGSFSLILI GPGIILLTSL GMQALLTMQS GVITQRGGAK SANEHRQWE TYKATSMHMG
WYMFVLNALI LVMILNEFRP NPLPGGFIIG LIGIIAATIV LLVLIGKTTT SLAKKYPMPD
QDGKTWGIFY NDPDDNRILV D

> aaRXA01071 (1-387, translated) 129 residues
NILYALLALS VIVAIIGIIN TLALNVIERR QEIGMLRAVG VKRGQVRTMI TLESVQIAIY
GAVIGIAIGL GLGWAFVTVM SGEGLDAAVS IPWGQVGLML VGSVVGVIA ALWPAVKASR
TPPLDAITD

> aaRXA01074 (1-705, translated) 235 residues
LAEAGLRWL AEASSAVAQV VSADAEQITT VGVETQLPTP DAAFKAGEEL ARIHLAGAPA
FGCPPAGWAG LNYIGTQQA CLSTPTWGVF YSQQRVLPFA RRARRRNHLT EHALWVVEAA
CDLISELPDD VPPARIHGDL WFGNLLFGTD GPVFIDPAAH GGHPETDLAM LDVFGAPYLD
EIREGYLSIN PLPDGWRERT PMHQLHPLAV HAASHGPSYG VELLHAAKAT LKLLD

> aaRXA01075 (1-411, translated) 137 residues
MDNPVNILNE QEALERLQSV SLGRVVVRRS DEMDIFPVNF IVDKGAIYIR TAEGNKLFSM
NLNHDVLF EA DEVKDGKAWS VVVRATAEIV RKLDEIATAD TLELKPWIPT LKSNFARIVP
NEITGREFTL GEEPERY

> aaRXA01076 (1-1020, translated) 340 residues
MTPAHIFSEG PINSVVLSD EDGNFTTSYQ DTFSDPSFLG EGDVLIEVGW SSLNYKDAMA
LKGDKGVVRT VPLIPGIDVV GTVIESADPR FGRGDEVVLN GAGLGENRHG GFTQRLKVPS
EPLHHPFNF SAQQVGALGT AGFTAALSVN ALVDQGIKPE DGEILVTGST GGVGSIALHL
LNKLGYYTVA VTGRREAHAE YLTSLGASDI IDRAELSEK RPLQKGRWAG VVDSVGSHTL
VNAIAQTKWG GIVTACGMAQ GPDLP GTVLP FILRGVHLVG INSVDAPREL RRRRAWALLSE
HLDTAVLDDM TTVIDVKDVA QAGEDLMAGK LHGRTAVRVH

> aaRXA01078 (1-834, translated) 278 residues
MSNAVPHNVS FNFVPRAYRP EKPRTFGMTE IRAPYYSTFG TRHLQDVFDV AGQWVDGIKW
AGGSFSLVPT EQVRAFS DIA HENNAYVSSG GWIETVLRYG DDAVDHYLKE AKEVGFDVIE
ISTGFIMLNT SGLQRLVEKV VKAGLKAKPE LGLQIGSGGD SGEAELAAEG KKDIDGLVDR

GKKALDAGAS IIMIESEGIT ENVTEWDTGA AASIINGLGL ENVMFEAADG PVFEWYVKNY
GNECNLFVDH SQILQLEGLR QNIWGNKSTW GRVINPAP

> aaRXA01083 (1-276, translated) 92 residues
MFPRIPLAMC AVAAIPAVVL RFSELSASPV ATMLIFGTAV VAASFVLAWA AEA VRKDISG
ALAVALLALV AVLPEYASET VVEHTYQTSA AN

> aaRXA01085 (1-957, translated) 319 residues
VTDKARNRDV HNEQQLARGE IGEMRSPMWV EVGAAILGVF VLVVMWLAWG GIGLLIQTMM
NTGSPNDKEL FDELGVPRYY VAVEQQIGTS SAHTTCYQPL DEFGNNFGDC TRSVPKEPVW
YADYVASVFA EHGFDAPEPI DNSVGSWLLF GHVGIIRVTF VIAVAAGVYA MSRAAMMRQL
ETQNVAVDTT DINQHTNDAR LAIPQEIVRD LSLFPDVGAAH SPVQPSSMIS HVMLSNKGLK
KVDVTQFAQE TIIDNDTGEI VSEKGEVLYD GAGQPITKSL PMIDNEFSHA IFDKSDVPNL
PELRRFFNPA KIEWNPGGS

> aaRXA01088 (1-1182, translated) 394 residues
MGLWIDATAG VAGDMLLGAL IDAGAELEKI QQVVEAVIPG DVLLRTEEVV RQGQRGIKLH
VDAQHEHHHH RHLSTIKELL VNADIPEQTK QDALGVFELI AIAEGKVHGI EPEKIHFEV
GAWDSIADIV GVCEAIRQLN PGLIAASPIA LGFGRIKAAH GDIPVPVPAV AELVKGWPTQ
TGALMESTEP VGELATPTGV ALIRHFATQD GPFPGGIINE VGIGAGTKDT EGRPNIVRAI
LFNTSRSNPD TRTLVQLEAN VDDQDPRLWP GVIEILFAAG AVDAWLTPIL MKKGRPAHRV
SALVDSSEVE AVKTALFAAT TTFGIRSWEV EREGLDRRFE QVEVDGHTIN IKIGSRDDQV
ISAQSEFEDI RSAVALGIS EREVVARIPQ GTTE

> aaRXA01091 (1-471, translated) 157 residues
MVPNTVLIHD ETADLATQIQ RLEHIMACLR DPVSGCPWDI EQTFASIAPH TIEEGYEVAD
AIAQEDWPEL RGELGDLFQ TVFHAQMARE AGHFALVDVV KAISDKMVL R HPHVFGAQS
AKSADQQVKI GKSSRRPSAR AKRKRAFWMA SRWDCLP

> aaRXA01092 (1-180, translated) 60 residues
VETAAFVAEQ LRSFGVDEIH TGIAKTGIIA LIHGREAGPV VGLRADMDAL PLTEITGVYY

> aaRXA01096 (1-699, translated) 233 residues
MKPRVLSALG IGAGALVVWI SSRMNWVTIE AFDDKSGSVT QSIVGATWST EIMALALALL
AAFAAALVLK RMGRRIIGGI SALIAGVAGSL SPLALLTQDP DAERARTLLT SGVASQKANS
GTLLSDWAEI INTTTHPLAA VVAMIGCALA LVGGVVLAMR PAEDTAKSNQ YERKQARA EK
IHTDLAQDPD SGRVMWTHSM KTLTSPRRLR NPKKPQVKAR VWHPDFFRHV CSG

> aaRXA01102 (1-1245, translated) 415 residues
VAVLVAVAAA FGSWSLLLPV VPLAVLNNGG SSAVAGATTG IFMAATVITQ IFTPAALRKI
GYTPVMAFAA FMLGVPAIGY IFSVEPIPV L VVSALRGIGF GALTVAESAL VAE LVPVRFL
QKASGMLGVF IGLSQMLFLP AGLALGDQFG YNVVYVLGAV IALVAAVMCL RIPQVKA AAK
QQPQVSEQR SVSTWKLVLV PSLAVTSLSM TFGAVSSFLP AAVIELDPGL GAALAGIILS
ITGGSSMVFR YLSGVIADRR GVPGTMMIPA QIIGFLGVVL ITVTIFQGWS VWLLIIGAVM
FGGAFGMVQN EALLSMFFRL PRTRVSEASA IWNIAFDSGT GIGSFLLGIV AASLAYS GAF
GSGAVVILFG IVLTTADRII GRHRITEYNN TRARLRQVPV ARRAVQGLRN RRKDR

> aaRXA01103 (1-225, translated) 75 residues
MNSSPISDMV TAAVQNEPDA GDRWFIYGLF LIAGLFFGGA WSAYKSENKI LMVAAGLIAV
LAVAGGILWL LGEMT

> aaRXA01107 (1-1200, translated) 400 residues
MDFTSVNDRN VPAPNTSIPF PVDLNRVTEA VDSLGYHYLS SEDRIIVPWQ DHRISMYFSH
ESGQMLTILG RTRLNLDMFA INDAARAVTE WNAERIGPTA LVHLGNDGEV ELKFRTTICI
DEGLSTQQLR QFINLSLDTT AMAVTYILER FSELNFSDTG SPDDTNNADE LSDEQDQADL
VEKIRGLYVP TPVEELIESL EDAEWEESDM ADEDAEDDYL DDDSEIEWET DDDYFEPEEV
DMDELLNGFL EDS DIPQEV T LERIRAQLHA IGVVKTSGED DFIIAWINEV FLGFFVDNGP
TFLVKGHWD P SMDPTRDFMK LFMMCNQWNE NSLTTKAFCH TDDKGLQVRV EFAVSVAEGL
NDDQLQH NIA LSIHHILQAI DSISTEATGS STVEWPEKNR

> aaRXA01108 (1-651, translated) 217 residues

MTYPGITS DH NPYDGYTGDD GAGNKRNL PN RKKINKSVGV YAGVFAL TLA LYAIGGA AWG
LLRPTYTAYV EDAETASIAV ETNTSFAGYA WFAIATGVLA AAIALFVFLR TPQHRGPV ML
LWLGVIS IAG SVAFLVFGNV ASTMLHGSPS DYASAIGASF QVAPTITPGV AFGVAPFLSV
CMYWCAAFVT PEEEIDQDDA GQGTSKASGS EMTGASG

> aaRXA01109 (1-642, translated) 214 residues
LSISLSSKKV AFAALMVTPL LLTACGSDSS DTEAASSSAA TTNSSSSSA ATSAEAAETT
SSESESEAT-TINEEQQAQL-DVLSQELSEN-PITFAEAPV-ENGETASPED-TAAIEALVRG
YTDNTLRSS LAYTINNTCT RVLEASGADA TQLDLNTIPD IPLGGEGTGT VDSITDVVNV
GQEASAWVVA TAGGTTDSAT QRFNEGGQW KFC D

> aaRXA01119 (1-930, translated) 310 residues
LAGVITGFAI ILSVIGVGFL LAKLGVINDD KQRLVLNRIA FYAATPALLF NVVARSDPSA
LISPVIVVTF VATIVTAAVY CVISAIFFKK DIATTATGAA ASAYVNSNNI GLPVSIYVLG
TGAYVAPILV MQMVIFAPMI LAALTSGDVK GSRGQKIWAA VKGSLLSPIV LASIAGLIVC
LLEIQLPAAV MEPTIILGGA SIPLILMSFG ASLPSTNVLA SKADRPSVLT ATAIVKIVGMP
AITWLIKAF GLEGDYLYAA VILAALPAAQ NVYNYAATYR KGEIVARDTV FLTTFLLALLG
MLGIAALFGR

> aaRXA01121 (1-678, translated) 226 residues
MNPEFIHGAT EIETTNRGLR PHRLSKEIVE RYCDPQFSAM ERQPSGVRV CRRTATSVTL
TTYSTRVVYL DSGRPGGKID VLIDGAPTSS TPTSGGETTE VNFITGATER RLKDPQVLT
DGLSEQEKVV EFWLPHNEEI EVISLKANAA LNTVEDTRPV WINYGSSISH GSVATAPTKI
WPAIVAQSKN YNLRNFGFGG SAMLDPFMAR LIRDTPADLI TLEIGI

> aaRXA01122 (1-522, translated) 174 residues
MPFPALLLPL IFWTGIAALS SWAVSRALPL RADNSIEIDA PVEKVDWFIE ETNRVPEWNE
HILYVQAPGE IEQGMKLKMK TRHPETNRLT LKFRPTIDVL RPHRELTWST KIVARWLLTV
TDTIELKPLE DGRTEVDQSM SFSGLVSPGV PFLASISRIK ENSNRQLKAL IEAE

> aaRXA01123 (1-447, translated) 149 residues
MRTLAAELNI KAPSLYKHVK TREDIAAHIA TKAFIQLGQS LHEHCESVED LLAEYRSMAR
ENPNIRYLLT SSEFPRELLP EGLETWAGTP FYLVTGHDPI KGQALWAFAH GMAILEIDAR
FAGPNNGSPA DGVWEIGARA FDTQVFDQG

> aaRXA01127 (1-279, translated) 93 residues
GIGLAASGNI DATGTNPSMF EPVHGSAPDI AGQGIADPTA AILSAAMLLR HLGDEDNAVR
IETAIAADVA GRDNSQPIST TEVGDRIVKA LQS

> aaRXA01128 (1-1014, translated) 338 residues
MSFTFIRTFE VLFGITLLVS CVPEPPDSYT KESTVLRYQV SDFNLNFVEL AVALGYLNNI
ELQVVGSVQG GVESIESLKK DDIDFAAVPF IGLVAGEIAT GAPIKAVAAS YGISHDSSSA
LLVLKDSEIH EVHDLIGKT V GINTLGALGS AMVERHLFDA GLTEPEIVSV TQRALPGEYL
EQRLYQGVQD AIWVTDSAKH QALETGDFRI LAEDSDLVQE LNTGCMVVSQ KLIDEHPAVV
GELVDGVAQA IEFERSHSPE EVREVFNYL EAHGQSDRIS SFRYWEHSGI ATRGGVLSDR
EFSMWSHWID RQYDVPDINP ASIYTNQFNP YRKVNPS

> aaRXA01129 (1-1866, translated) 622 residues
MVNLMSVELE EIRDFLAGFE PFAQLPAEEL DQLPGKMSLR YFRRGEEIIP IGVPNHMGV
IRSGAIDVLD QEGVLLDRRD AGRSFGYSTM GPERNSRYRM VAVEDSLVLR LGRDDFDELA
KRNPDNLNRY SSWSKRIRAA ADQLRQESS KVLRTKLGEF KIANPISCSP DTTIMDAIK
MHEFGVSSLL VQIDGELKGI ITDHYMRSRV VAKHLDIQLP VSEVMTVDPR CATSQGLAFE
AMLLMSELRI HHLPIVDDGQ ISGIVTAADI MRLLRHDPY LTADLSRKNT VEELANTFQS
AAEVASRFID RGASAEVSS LLTVAADSLA RRLVLVAERK FGAPPVPYCF VVVGSGQRKE
MGLASDQDNA LVLDNSYNDR EHGQYFAALS EFVCQGLDRA GQVLCPGDMM ASNPEWRKTA
DQWISTFHSW ITAPEPDALL HAQTFDFRG IYGDTEMAKD VHQNAVNMAR GARRMHAHLA
SLAARRDPPL GFFRGLVVER SGEYGATMDI KKGGTAGIVQ MARLYALATG SDAIGTRERL
IAASGHGQVS RKGAQDLLDA FDFLAAMAFQ HQARLIKVGE KPNYHIDPKT LGKMDREHLR
DAFSIIKDMQ SALATKYPVR NI

> aaRXA01131 (1-867, translated) 289 residues

MPPATLFNVL TSAGLDPHQS GDAIVVESAH FTLTFTWDEW LRAQATWVGE LSASDYVRSI
 VAINSAHDAR ATPKMMLDAP TGLTTVLKAD KGQLQAFAVE ALPIGDGLSE AQLAGFVAAA
 FDGAIDLTRE FHALYPERSP QERGAMLNK LVDASPSQTV TPVRVANWFM DQGVEEVPYD
 AASGRISFEL GDTFVDVILD DPELLKIQAV VVADRDVEAT EVLHLCNRRAN LDSDHSTIFM
 RSDGDDVDFV ATVAVPIRAG LNDFQLSQAL HDGVVGVVGQ VRAVINQLH

> aaRXA01134 (1-459, translated) 153 residues

SATQDTGVWK GIFALLMGRG ARDWRTGQQE DRWTFDELGC NEHQIFPTKW CKERGIDPVL
 TESVLNRTPM GRRTEVVIGD TPPSRYLSRV QSKSLMGDEE FDQMLDTHLL SAEDLHSSNT
 THFFASRRTN FIDMVEDAIG KAVIRDVNES DLT

> aaRXA01137 (1-360, translated) 120 residues

VRPTFVILRI SEYFGVAEAA INAATGRLTS LSEVFIDNAA EIQDNLSSLV ALQKDLAERV
 NVEGVNPNVTP VDLLELRLGS AQLAVAATAI EVRVAGGAGY VKSSSTSRRF RVEMGACTGP

> aaRXA01140 (1-786, translated) 262 residues

MALDTRGEEM RFRPRALSGA PDTGKDPGLL LLDGQQRLLT LYHCFSGDGY VNTVDFRSKK
 VTRKFYIDVA KAVESPVMSD EAIFSVDETG KIISHFGPVI DGGITDLETA LAHGCLPVSV
 LLDDNGTDFL FDLADMAGEG AREHAKRFQS QIVKTLVSYD IPMIRLDRET AKGGIGSIFA
 QANSSGLQMD VFDLLTAVFA ADESVETEF S LRDDWVRVER NLRQHSALDG IGSTEFLLTAV
 ALLVSARKGH ASGYREDILN LT

> aaRXA01148 (1-600, translated) 200 residues

MTSPVENVKK KPRPLALSPS RAGDYQQCPL LYRFRAIDRL PEPKTVQVK GTLVHAVLEY
 MHKLPREERE YPAMVKQLKP TWAQMCEEDA ELKELVPEDE LYDFLVDSRT LLRGYFEMEN
 PQGFDATECE MYVDTVLPNG VPVRGFIDRV DTAPPAKSEL STTRLARNQS RSGASKRSSR
 CCSMHWSTGA CSMKSQLSFV

> aaRXA01153 (1-543, translated) 181 residues

PFLSPIVST HAVVAYSTAR GFGEHRVRWD YAQESPLRDT RGFDLRRYHQ APVVDPHAIG
 VANVFVPNGA RFYVDHAHPE YSSPEVTNAW DAMVYDAAGD HILMQAVSDV ASFTSQNRVS
 LDGHDPAL KIIYKNNVDGK GASYGPHENY LYSRETDFDV LAQALIPFFV CRQVIIGAGR
 V

> aaRXA01154 (1-603, translated) 201 residues

EGIINTRDEP HTDADHWGRL HVIIGDANMS QTANFLKFGM TSLVLDIAEA GVDFSELKLLK
 NAVSEVAKVS HDLSLTHQLR LADGSELTAI DILRRYLDKV QPFAETPVEQ RVTALWGEVL
 GLENDLLST SHLLDWTAKL ALIKSFARG LSINDPKMYL IDLQYSDIDP QKSLYHALVS
 KGRMKTLCSA QDIADAAATS P

> aaRXA01155 (1-1365, translated) 455 residues

VESALTRRIM GIETGYGLTF VDGDSKKLRP DEIARRMFRP IVEKYSSSNI FIPNGSRILY
 DVGSHPEYAT AECNLTQLI NFEKAGDVIA DRMAVDAEES LAKEDIAGQV YLFKNNVDSV
 GNSYGCHENY LVGRSMPLKA LGKRLMPFLI TRQLICAGR IHHPNPLDKG ESFPLGYCIS
 QRS DHVWEGV SSATTRSRPI INTRDEPHAD SHSYRRLHVI VGDANMAEPS IALKVGSTLL
 VLEMIEADFG LPSLELANDI ASIREISRDA TGSTLLSLKD GTTMTALQIQ QVVFEHASKW
 LEQRPEPEFS GTSNTEMARV LDLWGRMLKA IESGDFSEVD TEIDWVIKKK LIDRFIQRG
 LGLDDPKLAQ VDLTYHDIRP GRGLFSVLQS RGMIKRWTTD EAILAAVDTA PDTTRAHLRG
 RILKAADTLG VPVTVDWMRH KVNRPPEQSV ELGDP

> aaRXA01156 (1-201, translated) 67 residues

VSVVNAKQTQ IMGGGGRDED NAEDSAQASG QVQINTEGVD SLLDEIDGLL ENNAEEFVRS
 YVQKGGE

> aaRXA01158 (1-942, translated) 314 residues

MSIVEHIKEF RRRLLIALAG ILVGTIIGFI WYDFSFWQIP TLGELLRPY CSLPAESRWA
 MSDSEECRL ATGPFDPFML RLKVAALVGM VLGSPVWLSQ LWGFITPLM KNERRYTAIF
 VTIAVVLVFG GAVLAYFVVA YGLEFLLTIG GDTQAAALTG DKYFGFLLAL LAIFGVSEFV
 PLVIGMLNIV GILPYDAIKD KRRMIIMILF VFAAFMTPGQ DPFTMLVLAL SLTVLVELAL
 QFCRFNDKRR DKKRPEWLDG DDLASPLDT SAGGEDAPSP VETPEAVEPS RMLNPSGEAS
 ISYKPGRADF GDVL

> aaRXA01159 (1-315, translated) 105 residues
 MSLGPWEIGI IVLLIIVLFG AKKLPDAARS IGRSMRIFKS EVKEMNKDGD TPEQQQQPQQ
 QIAPNQIEAP QPNFEQHYQG QQVQQPQNPO TPDYRQNYED PNRTS

> aaRXA01160 (1-975, translated) 325 residues
 KSSNKISDLA RQLNLLPYFT RYKGRTVMEA ARDLGQPSSQ IMEDLNRLWM CGLPGLLPGD
 LVELDHSEKE VKIHNAQGM D KPLRLTPTEA GVLLLTLESL ESLPGIAKQE AVVSAANKLR
 AIMGEYSSTV FDSTGEDLDA EVLEIIRDAM DLHQVVSFEY HSHRSDNTSL RQVSPAHIPT
 HEGETYIKAW EEAVNQWRTF RLDRIIRSIVL LDSKAVHPAR GVSVDSTDDPF EFAKSSDIAT
 LLLREDAMWL GNYMAMEVDE TVEPIRSDSG FSWHTVHFPL LSRDWFVRFA IGHAHLKVT
 SPEDLRKCIK QKAFSGLSAY DHHVE

> aaRXA01163 (1-705, translated) 235 residues
 MGYTNLNDTR VLRAGSCDAW WRTMSPLVQQ GSEAVFRRIM GLSRRPDRKP GFDDVPHFGA
 AVRVPGLKHG TLVNAAPLKV LGARGEPNPA SSYRFEYITG DSAGRAITAT GAVLFSTRPW
 TTGPRPAIAM APSTQGVQAH CDPSTCAIG LNAFYDKPFD AIIAYELPVI LWFLAHGLDV
 VFIDYPRDPA TGVQYYCDSI AAASLLDAV LASRQLGLSP EAPLGLWGFS QGGGA

> aaRXA01165 (1-573, translated) 191 residues
 MVGHVPAAIA IPYFIIIEILA FIGVVMWLGFWALGGLLVLF FVGGLLLAGV ELRRISKSAA
 IHQASGQGS A GAIAGNIGLT AAGAILVAMP GFVSSIIGLL FIFAPTRALF RKVLAKRMRS
 AIENLGVGRF EAVNGYRTQA SYGNFGAAFN GGAQQPSNEP IVIDEIDEIQ WTSCLKPEDF
 TKGKDESDGE K

> aaRXA01166 (1-483, translated) 161 residues
 LTGVIAIAIA GLAVNSSEMF EEIMSVLNER GVSDVLKNIT SCAGGSLLAS GYSSSRGWTH
 QGTPLADILD DLPLVVAEFG KQKLGRVAPE IPVLLWGSKN DDVIPIDPIR ELRDSWADKG
 TPLTWHEQA PRVPGRTGLN HFGPYFRNLE KYSGWLIDHL V

> aaRXA01167 (1-321, translated) 107 residues
 PRQLVKYKTA DGEIYEVPPA DDAEIPEEWM CKNGKLGILM EGEVSKPV KPPRTHWDM
 RERSIEELD VLLEERIEAL RKRRRNAAKL LKAQQAEEA EKAAEEV

> aaRXA01169 (1-567, translated) 189 residues
 IPVFLAVFVG SDALGSISFG PFVEAFFLLI LIPLVAAAGT QQVARKWQVG RTIMAAAEAI
 MVPLMMLTLF AVIASQVEAV SGQFTDIATV VPLYVAFLMV MIPIGGGISK LGGLGFKEQR
 AIVFSGATRN SLVVLPLALA LPAGLEIAAV VVVTQTLVEL IGMVVYVRII PLIFHEKQTY
 RKLSGIGES

> aaRXA01170 (1-483, translated) 161 residues
 VSLSNKAKGI VAVIIVAWIV AMAGMVAYAS SNNADKTFPT AGALEQTVAA FDRQGLQVSA
 VALADIYGE YVSAAILCEG TPTATLEQSL GVDLSELNLD ESGVPSGVSY LALSNQDGEV
 VYDKIDRANV DLCATPLNGA FSAYSLMPVA KVGENSWAIA A

> aaRXA01171 (1-693, translated) 231 residues
 MSQAAGKFKP MTSTLAESTL TSLKELEDPK ILSVNERHGD DHAVNLTKLR AVAKELKKNQ
 PLARELWATD DTAARLVALL ICRPKEFDQS ELDSMIHEAR TPKVLDWLIN YVVKKNPHWN
 DLRLVWLEDP AENVAAAGWA LNTHAVITKP DALDDSEILD TIEAQMKTAE PRVQWSMNEC
 LAQIGIHRPE LRDRAIAIGE RLEVLKDYPT PPNCTSPFAP IWIEEMVRRK K

> aaRXA01173 (1-615, translated) 205 residues
 MHVSTLPNKK LRTRIFAGTA AVALSLGVAS CSNAEDAVDS ATDAANSATS AAGSAINDAT
 GTSSASTTEP SGTSGSDSGS DSAGGDTTEV ESADGSTISI PTAVVTAANA AGFSTPESVE
 EGPNGESLVT FPEGYIVNSA EGGAQALVGM IGETWIGEGG LSAAVGLPTG PEEATTNGWT
 QQFTSGVISW LDDGSGQFAA SVEPA

> aaRXA01174 (1-750, translated) 250 residues
 MSNMQGNDSK KSSGASRAES PLIKFRTLII VIFVILIVGL ASIAVGPVVY QLIMPGVKIT
 EGIQADGAAP ASTDMNGTWD VAPGSIPNTT SAGFTFAEIL PGEEKITSGS TTGVTGEVVI
 EDNSLISGLI TVNMTHTTD QEKRDINVRT KLFHTDQYPE ATFEVTDSDV LSALPDTGSI

AQVVIPGELT IHGETKAVEP TFDVLRITGDQ VIVASDIEIN RLDFGVETPE FIAAKINETG
EINVRIVLEK

> aaRXA01176 (1-504, translated) 168 residues
VRYFYDTEFI EDGRTIELVS IGIVAEDGRE YYAVSTQFDS SKANAWVRAN VLDKLPNPSS
KVWKSADTIK REVYEFLTST GPTPELWAWV GAYDHVLLAQ MWGDMAGLPR EIPRFTRELK
QYWDMAGRPT LPPELNGNHD ALIDARHNLA KFKVCMAALP LGKRDRVS

> aaRXA01177 (1-1986, translated) 662 residues
MHGEKLVDTG EGNLSQFQWR DMATNQTLRK ALLVLSTIAL LLTLWPSIFN VRAIESFVFF
FHIDTDVYRA GANAFLHGEN LYTDYQVGS IQLPFTYPI SAALFVPLAI LASSVAGIAL
TLISTVLLWW SVAIVLRRVL KGLTDADSRF VSYLILPMAL STEPVFQTLQ FGQVNIILMA
LVLMDTFTHK PWLPRGFVIG LAASIKLTPA VFGLYFLVKK DWKGAGVAIA SGVGFSAALF
ILSPSSSKIY WTETLNDPSR IGNLSYIANQ SVRGTLSRMM HEQQDLVEKL WLVAIVLCIA
AVAVAMWRVW RAGNPYGAVM LNSLIALLCS PVSWSHHWVW LIPIAIGLGA SAWNQRRTPA
GIAATAGVLA LLTTIPMFIT TFWNMPYDSE SYPFWPLILQ PSGNAYVVVV IAILIVAINV
PTVLGSGNKA VSGQAEKKSS PALLVLAIA IFYLFANIWF KGNNQNKALI QYPLQTMGR
GLTDFGELIF EFAASSNQLV SLWIIGALNA IALAITLWFL LQRFAGKKSS WLIYLSVAV
ALMMFSVQDA LQFGSLTLVA LALITVDVLS VREIGRRGLL TGLAAALFGW PILIVIGFLI
HRRYAATITT TVTAAVLWIL GILLNPDAFN LNLLRQWFNG RDGRDNLSTY AFLARWVSES
PA

> aaRXA01178 (1-450, translated) 150 residues
MMFVWFIVL GLGAWAIHRT WSHGFKDLSV ALSIALPTLV LPIVELHHLV LLLPLIAVL
RQGRVAISYL IGFIYLVSWT PQHLSYSTVF PLNDPAPEGY VAHFGWYLLV EPMVAAPAAI
ILGAFIACAA TTPKTSQLVQ VDKSSAENTK

> aaRXA01184 (1-1473, translated) 491 residues
MGLFGFGIFL ALGLGQDHMG ILAGVSVGM VAYCIAAFMW PSGEGQLDPT AFSTMPLSAK
QLLPFGAIGT LLQSRGIIAV ICTVATSIIA AVFLPVGSWP MIVFMMAVSL VTTLLLGELL
GALTSGSSSR VSNDRRTVLT SVVFMVGVG YNMLIGADGM SRIDAIGAYT KWTFPGAGAG
AIEFAVGLW GEAGLLTLA FVYVAGFWL WSQILNALT APLDQGGQGO SAKDSAGEGK
KVLFLPGIPW SVGGAIKFSR LRYMFRDRL LGSMIVFPLL GVLFIFQSFT VEFMIYVGL
IMMAVFGSV ATNDFGYDGP SLWLNIVAGV KARTLLMPRH WASMLPGSVS IVVFMITIV
LAENKTTAVL ICFILGIFI SSAVALLVT TFNPYPTSKP GTSPWGDRSG YSGAAVGFAG
AALLLGWIPT IPTIALGIFG LVTQMMWII LAEVLAILP VAVYIGVAKV CIRKVEKDL
EIFDKVKTHV K

> aaRXA01186 (1-1098, translated) 366 residues
MATPVPLVFN APKRGMPPTH FADLNDEARI EALKEGLPK FRLNQIARHY YGRLEADPLT
MTDLPEGARQ EVKDALFPTL MSPLRVVETD DDTTQKTLWK LHDGTLLESV LMRYSDRSTL
CISSQAGCGM ACPFCATGQG GLDRNLSIGE IVDQVRNAAA TMQSEGGRLS NIVFMGMGEP
LANYKRVSVA VRQITQPSA GFGISQSVT VSTVGLAPAI RKLADEEMSV TLAVSLHTPD
DELRLTLVPV NNRWPVAEVL DAARYADKS GRRVSIEYAL IRDVNDQDWR ADMLGEKLHK
ALGSRVHVN IPLNPTPGSK WDAAPKARQD EFVRRVIAKG VPCTVRDTKG QEIAAACGQL
AAEESA

> aaRXA01187 (1-459, translated) 153 residues
VDPFETNPND LPTGLDPAYE GNSELNPLGG KNIPDEPEVT ANTPAVQEEP AYSEPETA
SKRQAKQNTK KSEPVVAPKQ TLAGGTWVAL IVGALLLILL LVFIMQNQTT VELNLFAWTF
QFPAGIGFLL AAITGALIMA LGGGVRMFEY RRS

> aaRXA01195 (1-447, translated) 149 residues
VIVAVSAVLL AAWRFFTLRS RGTTVILREL PQSGVHGWRH GSFYNGNDL EYFKLRSLSP
MADLILNRLS VTLLDRRDPA ADEAVFMSQG LKILHIKSKN DQIELALDAH GEMAFATWLE
AAPDARAEHS LNPRDFNRFR ASKDTRKNR

> aaRXA01196 (1-690, translated) 230 residues
MRLVIARCSV DYVGRLEAHL PSADRLMVK ADGSVSIHAD DRAYKPLNWM TPPCSLVETP
ITDEDGEATG ESLWVVENKK GEQLRITVEE IHSEQNFDLG QDPGLVKDGV EDHLQELLAE
HITTLGDGYT LIRREYPTAI GPVDILCRNS DGETVAVEIK RRGIDGVEQ LTRYLELLNR

DELLKPVHGV FAAQEIKPQA KTLAEDRGIK CVTLDYQALR GIESNELTLF

> aaRXA01197 (1-453, translated) 151 residues
 MSTEQSLNIP HEYVICLDHV GIAVPDLEEA IEFYRSAFGW VNHHQEINEE QGISEAMIGP
 KDIKSTEGMI QLIAPLNEDS TIAKFLEKKG PGIQQMCLRT NNIDALSEHL RRQGVRLLYP
 EPKNGTGGAR INFLHPKDAG GVLEITQPQ S

> aaRXA01198 (1-303, translated) 101 residues
 MIVAFSVAPT VTDNPDAEMA DAVTEAIRIV RASGLPNETN AMFTLIEGEW DEVMAVIKEA
 TEAISRVSPR TSLVIKADIR PGHTGQLTRK VEAVERLAR D

> aaRXA01206 (1-261, translated) 87 residues
 VSAENTENTD SPFEISEFDD HRRPLQRALK FGSIALIVFT LISLAIWGAT RGVPGVSAV
 IGAAVGAGFV LLTALSVLFT TNSNVTT

> aaRXA01207 (1-648, translated) 216 residues
 VSRIYDCADQ DSRAAGLKAA VDAVKAGQLV VLPTDTLYGL GCDAFNNEAV ANLLATKHRG
 PDMPVPVLVG SWDTIQGLVH SYSAQAKALV EAFWPGGLSI IVPQAPSLPW NLGDTRGTVM
 LRMLHPVAI ELLRQTGPMA VSSANISGHT PPTTVLEARQ QLNQNVAVYL DGGEALATP
 STIVDISGPA PKILREGAIS AERVGEVLGV SAESLR

> aaRXA01210 (1-693, translated) 231 residues
 VFPVGIPLLL FLIGNGGAAE SANSFDYFVM YTLLFVQFYT VLSMATTRRD ERVLKRLRTG
 EARDIDIIGA ICFPGALLTL IFTVVIIPLL MVLGAPAPIN LVPIVFAVLI GLLLCALAL
 MTSGFTRNAE AAQMTSMPVF MLAMGGLGSI RFVFGDSIVA DILAYTPFAA ISDLVQIGWA
 GATFADSVGG VEAANFAGIF QDMLIPLGIL AAWTAAVWA ANRYMRWDSY R

> aaRXA01213 (1-1227, translated) 409 residues
 MTNPTEERNA RRLIWANGLQ NIGDQIVAAK TVLPWLLQAA GAPGFLALL VPIREAGSML
 PQAAITGWVL RQTSRSKVWV IGSNGQFVSA LGIGVAALFL RGWALGITVI VLLAALSFLR
 SMCSIASKDV QGKVISKGR GLVTGRATVI GGVMGLVAGL AIAIFLGSHS PTRVLAAVVI
 ASSFSWLFAS IVFARIEYAK PATPKNAPS NPWVRRCIAA LKDDKAFFRF VLVRSMMLVT
 ALSTAFIVAL AAESGNSIDS LGFFLIASGL ASMVGGRISG IWSDHSSKNV MAGGALFGSI
 VLILVVLSSA FAPAQINTLV FPLSFFLITL AHTAIRVARK TYVMDMAEGD QRTRYVADAN
 TLMGVVLLIV GALSGFIAIF GNEAALLFLA AIGLLGTISA RGLKEVSAG

> aaRXA01218 (1-429, translated) 143 residues
 MARLQHDMIF INLPVSDLAA SKRFYAGLGF KENTVFSDEH TASFEVSDAI VVMLLETARF
 SDFTKRPIVE KNGSREVLNC LSVCTEDAD EFVRRAQEFG GTITRELAEE GPMYGGAFDD
 PDGHGWELMY FDPEALAQMM PEG

> aaRXA01229 (1-693, translated) 231 residues
 MIISTNTAHP LHEPHVPSHH NRMNTLRAGV LGANDGIVSI AALLLGVIAT GASDTVVFGA
 GLASTIAGAV SMALGEYVSV SSQRDTERVL IAKEAKELAE DPTAEHVELS EILHSYGISP
 ETANQAATEI QGDALGAHL QLELGIDNEQ LTSPLAAAFS SAVAFLLGAL LPMVSVFIAP
 AGWDAGVVFV VTLLVLAVTG FISAQISGTS PMRACGRLVI GGALGLALTY G

> aaRXA01231 (1-504, translated) 168 residues
 MLGYTFVIFI LAPFLILTGI AMAPAIRSRF PWYVKLFGGH QGARS LHFA MVLMTGFVIM
 HXRPGLVHG DYNMVHMFV DMNTDRAAQA YIIVITTIVX GGVLXAXQY IXXWXTXXAX
 XGXPPXSXEX XRKIFXXPAA SPDEQAXXHL HGQGH LAVPL DQWPAADR

> aaRXA01234 (1-384, translated) 128 residues
 MWKFMKTQYV CTTYFIAAPE DEDEAYQTYR SRMNSLAALN GADVVSADG LRMEVDQDIW
 GSLAEQYQIE QEGLYPTGHN LYFVVTVVNL DDSDEVYDRT MEHLIMDDPY VRVDRFPSTV
 HASTQIML

> aaRXA01237 (1-441, translated) 147 residues
 MNVQFESDMA VQPGNTMEAT VTDIRDAKRR TTQLDSVTPF KKNCPSTRLL DTISDKWAVL
 ILLSMENGPQ RNGEIKDQVQ GITPKMLTQR LGVLVEDGLV TRTSHAVVPP RVDYQLTDLG
 ASVIEPCRAM YSWAVENIKQ VEAYRSA

> aaRXA01246 (1-639, translated) 213 residues
 MKRTITIAAL ALTSTLVLSA CADNTEGENT DTTTIATTS A PDTTETTGAT TDPETETGAA
 GEVSAEHND A DIMFAQM MIP HHQQAVEMSE ILLAKDDIPA EVIEFTQGVI DAQGPEIDRM
 NTMLETWEED PVTGDMGEMD HGGMSGMMSE EDMTALEDAQ GTEAARLYLE QMTAHHEGAV
 DMRDEVTDG QNPQAIALAE QVIEDQEAEI AEI

> aaRXA01249 (1-300, translated) 100 residues
 VSQDTFLTTH GLAAMDAVEI IDHLDRQKVT ERPTDLIASV RADELLLSDD DQEVVVDLPD
 NQTYVSIAPY LNSTHDCFYH SLTTCLGDLN NEDIHVMITD

> aaRXA01251 (1-309, translated) 103 residues
 MTQPDMSQIL AQAQQMQAQL QAAQQEILAT TVVGNAGNGL VVTVMAGNGE VFAVTVDPKV
 VDPEDVETLQ DLLLGAFKDA HNKVANVAEE KMGPLSQGMG GLF

> aaRXA01263 (1-912, translated) 304 residues
 LTPYDPTAVN KESEKEAAKN LFGAEALTVD PDAGEVVDRV DNFYPTTAKA KRDYPSNYAA
 GCHQEVNETS PESCVYGDKN SDFSVALVGD SHAGHWLPAL EPIAEAQGWR LEVYTKSQCP
 LISTAIKLGE TFYAECYEWN EKLLAKLTGP SAPNHVIVSS QRYASANPLI DSVATGTVSE
 GYEMAWNSLK DAGVSISVLL DTPRPQIDIP ECVASNRDNL SECSVHRSA LGTEAHPQKQ
 TAAQNIDVPV LDLSNWICPE EYCSAVIGNV LVYRDSHHLT ATYARSLSSA LWNELVASNG
 EPPK

> aaRXA01266 (1-1035, translated) 345 residues
 MPKVS VVTGF YNRCEHLERT IESILNQYTS DFELIVFDDA STDGTASRLI ELKEKYDDPR
 FRFIIHEENK GFVKGLSEAI SGAQGQYIAV QGSGDVSLPR RLELQVEFLD ANPSVGAVGG
 AIYNIQEDTG TRNPQRFEPK IATFDDLLTS NPFTHGEMY RLDLYKSIGG YRSGFTFAQD
 RDLWLRAKK ADLGIIPDFL YHRYTLDDGV SFVPDKTIRQ RCFSEAAVRL ALMPEEEGAL
 AYSRLAEGP TAVVPIADRA VQKFVPKAAI RLCLYGAPET GLHMARDYIQ NPLRRTIVVV
 LISIYSSRLI KPLQDILYKS IFKGVSSISK IKSSLVKFTR RIQK

> aaRXA01267 (1-1314, translated) 438 residues
 MYAEINGGFI PEGTVRVSGA KNSATRLLA ALLTDEVVHL GNFTPKLVDV EHKIRFIEEL
 GKKVHVDHDE QILVVDAKDL AAREMTDEL NIPRTTYLL AAAQIGRGEI ARVPFPGGCA
 IGGGPAGGRG YDLHLMVWEQ LGCKILEKDD HIEVTAPQGF IGGVIDFPIS TVGGTENALL
 CASIASGDTK IANAYITPEI TDLIELLRM GAEITVYGT S RIHVKGAGL LQGAYMDVMP
 DRIEALTWIV YGIISGGRT VEGVPFSSME VPFHLEKAG VDLFRNSSSV YITPECLPSG
 SVQPFELACG THPGVISDMQ ALFVLLGLKG AGTSRVYDYR YPERIAFVEE LTNLVSGDKL
 SAEAGKITIQ GDATFRPGYA NSTDLRGSM VVLAALCADG KSTINNVHMA LRGYNELDKK
 LRLLGADLTI REGEVPSP

> aaRXA01268 (1-840, translated) 280 residues
 VAARIARVPR IVYVAHGLRS ETVLGLKKKI LVFLEYLTQL FAHQTLAVSH SLKKAIEDAH
 PRFKGRVQVL GYGSMNGVEL DRFRVPSLEE KLSARNALNL PSKSVIVGFV GRINKDKGGD
 LLAALTKHEA FTRLRLHLI IGELEDDDLR EAFIKLVNEG QVTITGWIDF PEEPLAADV
 LLHPTQREGL GMSLLEAQAM GVPVLTNAV GTVDAVTSGE GGFFADDDSV ESWVSKIDLL
 VSDPKLRDRM GRAGRQFVSA RFNRDDVAAR FSHFVEQFKK

> aaRXA01271 (1-1812, translated) 604 residues
 MAISIGKAGQ NLKGSVPIGK VLFLIDALAW ISALFIGVVL RYEFNLSSIN WSAFAWFLA
 AVILQFVLGL SLHLYRKGLR HLFSGFEDTL NVSISVIVVG VVLWIASLFV GQRWKISRGV
 MLLVIPLALV FVLAVRYLAR MRVERFRPA ADSTPALILG GGYIGTNLIQ WMMSDPKSPF
 RVPGVIDDNP ELACQVRGV PVLGKFDDIA QVASDTGAEL LIVAIGDADS ALLRRVQDTA
 NKNGLSVKVM PAIDRVVSKG VRGNLDRDLS IEDLLGRQPV ETNVSEITGY LTGKRVLTG
 AGGSIGSQLC TEIAKYGPAE LMMLDRDET G LQQVLINVAG NGLLDTDAVV LADIREADAM
 KEIFLKRKPE VVFHAAALKH LPMLEQYPDE GWKTNVLGTL NVLAAAEAVG VETFVNISTD
 KANPTSVLG HSKRVAEKL AWYQONSTSK YLSVRFGNVI GSRGSM LPTF TRLIMEDKPL
 TVTHPDVTRF FMTIPEACQL VLQAGGIGRS GEVLILDMGE PVSILEIAQR MIAMSGKIDID
 IVFTGLREGE KMHEELVGDG ETEDRPFHSH ISHAHAESLA PNNLDRDRFM QRAGKLASTD
 SEII

> aaRxA01273 (1-1434, translated) 478 residues

MELREYATIL MKNWVLIVIA SILGIAAGAG FSLLATPEYQ SRTQLYVSVR SGAGTTSDMV
 QGANFSRQIV NSYVDVIKTG VVLEPVVDEL GLELTANQLS SHISAASPAD TALINITASS
 PSPQQAEEIA NAVGESFKNV IQTELEPDSG DGMSPINLTT TQVALEPSSP VSPNVMNNIL
 LGLLVGLAIG VGIAVLRAAL DTRIHSRLDI EEVTDKPLL GIIADSEVEK HPLIIKHKPH
 SPIAESFRAL RTNLQFLNVG GSSSVFVISS ANPGEKSTT SVNLAALAE AGSRVALIEA
 DLRLPRVSKY LGVEGNAGLT DILIGAEVN DVLQRWGRTO LYLPAGRIP PNPSELLGSA
 EMDKVIAELE ESFDYVIIDA PPALAVTDAA VIGHGKAGIL IAVSAGSTKK PELEATLSTL
 ENADANVVG VVATMLPPKSV AGYGYGNYGY GDTSKINAPK PDNTELTSTD ASKANNEQ

> aaRxA01275 (1-918, translated) 306 residues

MEKIRSPAVQ SDALQVFKSA LAATVTWWIS VNLLNSQLPF LAPWVALMTM QFTVYHTFIS
 GIQTATASVI GVGLSFVIGT YLDVSVWTFG LAMVIGLIGA RVPKLRAEGI GIATTSIFLL
 ASGFDDQQPL LYDRILEILL GVAVAIANL IIFPPLRDQE ANMVVGNLDR RMGEVLQKMA
 DELAEKWNID NADEWLEEIN SINNDLEKAW HSVRFVRESR RVNPRKIRIQ EGRPQPTETS
 YESNLTSIDE GIAHLRHLAR TLRDTPIDS DWGSSIPATV GIPYARCSF ARRESSEGNRS
 YPRPAL

> aaRxA01276 (1-546, translated) 182 residues

MRKTLITMLA TTAIAFSAIS PVQAQTVDTD TDASVSSELS SGTSSGSSSED SEDSDISNRD
 IIFGIAAIAA VGGLIAGGVH WAVQORMIPN PLPGIIPNPP ALAPQAPAPA PAPAPAPQAV
 APQVAPQV APAPAPVQTN RTYKNCDEVW NVLGRSIRQS DPGYGTHLDR DRDGIGCESR
 PR

> aaRxA01281 (1-762, translated) 254 residues

VGLSRSHYQL AAENTKSLVR MVPMTVPQGN EPAKKLATDL NRNQVDELS AAVSRGQLTL
 EEFEDRSSKA WNARHLDTLV ELISDVNDNP YTLLGQQFPG ASYAPAAJET TPPAMPNVSD
 PVNIVNRIT GNPNGSKMSV SFMGGTVRKG GWHVPNVHTS FAMMGGNQID LRDAFLESDR
 IQINAYTFMG GIEIIVPEGV FVICDGMGIF GGFEQSVDKA GALNPARLPS NAPTIVHIKGL
 AFMGGVS VVT KKN

> aaRxA01282 (1-780, translated) 260 residues

MDELLKQEVK DFLTTRRARI TPAAAGLETQ PWSDRRVPGL RREEVADLAG ISLEYIRFE
 RGNLKGASPE ILQSLAKALQ LSPIEREHLH NLAYRADHPR NLPSAETPTA PLQDIVDAVT
 DKPAWIRNEQ MDILATNRLC AELYAPIFKD LPDRPNTARH CFIGATASEF WVD RDQFSAE
 FAKLRLEYA RRPSVPGLKE LIDELHQKSS VFRDNWASAD VLSFGSGIKR FRHPTLGERV
 YEYETFNLS APGYVLSIYF

> aaRxA01294 (1-666, translated) 222 residues

MSTIPDVFTS EVFPEISGTK EFRGLTYMEF DQFTLPTEAQ LEQAKAAGWS LITGWWNNSD
 TDLEDVELED ITNEGDSLKP LTDEFVSSL STFDLNSQGL PNDDREPQPI EADSLLDIF
 SEEEGWGLMA INCPNWQVPA ACEWLGMNV GEPFEMSHVL RVWQNSWGVE ALAFGGEEDD
 ADLLLRVPEE SEELLKALAV ASDQVTTYKH EDLGLASLW FD

> aaRxA01295 (1-975, translated) 325 residues

MTENLDNALL SMRMKPVQMA LMTLGYNHDM AVTDSGMELI VRRPGLTVNF NLDSVTLCIV
 ADFMWHGCV AKKQAEYLRA ANEFNRPTRD LQVVLDEADS KNMTVRGREF FFSSVGATWE
 QSAEFVHYCM NDVATTFVSW CEQIWPKEFSP ERVEFNATPP DVDFEFSEDQ LKEGNPFGLI
 DEPTPLVSLD RIYQQYELMG ADQLKMGEDF VEYLHMGQRV SAWLTDGNNG SDRKTLAVSS
 GTGVKIKNKK QLQELLGLCN LYSKEHVLVT VFAEEIENGA RWGIFAEARI DLPAGLNDHQ
 LWVFLANSSK WTAEVCLTVA HRLQN

> aaRxA01296 (1-1083, translated) 361 residues

MSIEQAITS SARVRELKPI IETEEATKTA LIIPFISNVL GYDVTDPREV IPEYTADVG
 KKGEKVDFAI KTGDDFHFLI ECKKVGSPLS LDHANQLVRY FNVTDEFAI LTNGEIQFY
 GQLDAANRMD AKPFMTLDLN NIDARQFPHL EMCTRKHFP QALANAEEEL KYIAELKKVI
 ANQFQEPDVE IVKMLAATVT TKRMTAQNLE FFTRLVNTAS SQFLKDEVNR RLRS AQVFED
 PVQTQGADE TPAEDEAVIE EVVSEIVTTE EEIHGHSIVR AICCSEVSAQ EITMRDAKSY
 CAILFQDNNR KPIARFYFDR KIPRIGIFNA EGEQEHFDE SIEDIYNHAD LLHSRVVALN

A

> aaRXA01301 (1-405, translated) 135 residues
 FLRLEGIEPK GPARAYYFGD VSDTVDILIG FVPSPAQAES LRRGALSQSG GDIDDVVLHH
 FRDMKTMHSR HSGPFDGVER VWDEILDEVE DLGCTLPSSS IGWEEYIEGP ATADTCQQLA
 SEVYVQVCQA PVKSA

> aaRXA01304 (1-486, translated) 162 residues
 MPAQNKNLPG SVIVVSDRIK SGERIDKAGP VAVDLLQESG VEISTFTVVE EGFEPVHQEL
 VKALARRDRV IITIGGTGVG PRNRTPEATE PHIDTLLPGL MTQILFSGLS NTAQAGLSRG
 LVGLSARDST AALIVNAPSS SGGVRDALGV VCPLFGSIFE RL

> aaRXA01306 (1-1008, translated) 336 residues
 MTEWYVVLPA TILLIALSAF FVIIEFALLA ARNRLEETV ETSRSSRAAL RSLNELTMLL
 AGAQLGITMV TFALGAITKP WVHYALMPLF EWARIPLVMA DVIAFILSLF IVTFLHLVIG
 EMAPKSWAIA HPETALRTIA IPARGFINLF RPLLQWINKM ANDLVRKVGE TPVDRAAAGG
 YDSDLHALI EHSRETGALD QQSAAQISGI IKLDKITVGQ TLTASPFTHS ASATVAEVQA
 AAQRSGSLRV LIDAPSHLFP HVIHVRDTLG ASPDEKASKW SRPILTVAET DTLHQALEYM
 REHNEQISAV LSADGKTVLG VITWDHILKY LWPASV

> aaRXA01310 (1-327, translated) 109 residues
 MSSAKKKPAP ERMHYIKGYV PVAYSSPHSS LERSATWLGM GFLTALAGV GAVLFAVGAN
 SVGQQQEHVW LYSIIGVVFA VVCTVLGTVL IIKGRAPYNR YVKETGRTO

> aaRXA01313 (1-945, translated) 315 residues
 ALRLISQLLA PSAALNFKSE RNAVDVAKHM LASQAQQRGS ALVALDTRSE NADAATALRK
 SLLIRSWTOR GTHQILAAED VRWMTLLCSP RILAASAKRR SSLSLDSAAV QRARDALTTA
 AEKSPVSRTO AYEIFRSVDV DPGEHRGQHL LRHFGGEGDI VQGPPIGTED SFVLLDSICP
 LSLALNGDEA LTEMTRRYFH SRGAATVKDL VWWTGLTVRD VKKGIAAVSS DGLIHSVEGP
 NGEEMWIPTW ADDVTDAEVS DALALELTLF AFDEYLLSYT DRSHVMDPEH LFSIGPGKNG
 VFKPFPVQVQ EALPV

> aaRXA01315 (1-651, translated) 217 residues
 VDIEEQPSLR EIKRQMTLEA IEDNATRLIL ERGFDNVTIE DICAEGISK RTFFNYVESK
 ESVAIGHTAK LPTDEEREAF LATRHENIID TVFDLVINLF GNHDNSKSGV AGDIMRRRK
 IRVKHPELAV QHFARFHQAR EGGLEHLIVEY FEKWPGSQHL DEPADREAIA IVGLLISVML
 QGSREWHMPP QGTQADFQAC CRKAIKNTFL LRGGFSE

> aaRXA01316 (1-303, translated) 101 residues
 MDISMLNVIT SYTIWAIFAI IGICGFVGAF LAATTREDAF EVADRQKKMV WVAIILASGF
 VLTALGPSIP ILPWVAIIMI GLYWFVDRPQ IKSILEGAGG W

> aaRXA01317 (1-420, translated) 140 residues
 MSDAKDDSIL SKWSNAASEL SGAVSGVAKK LREELSEKET FSKLKTEASE AVDQAKSGSY
 LDAGKEFARD AGSIIKDAK TVKGAVSDSD KNDVKSAFGN AVEASRDKFD DTLEKRKAKK
 DSPEPGDDDI IDGEVIPPQN

> aaRXA01318 (1-1302, translated) 434 residues
 MGKHEVAQQT VPGPSPPEMEA QRRKELRKHK AIATGLLIFA AAVYFLCRFV ETRPGETAAW
 VGFVRAAAEA GMIGGLADWF AVTALFRHPL WLPIPHTAII PRKKDQLGEA LSGFVGDNLF
 NAQLITEKVS QARIPERAGE WLAQPENGEK VSREVGKLT NIVRAIDPSD AEAIVKSAVI
 DKLAEPWGP PAGRLLEQLL AEGKAEPVVQ ELAQWLHKKK LGSEPLIDRL LNERRPIWAP
 KFTAQLVSGK VYDEVIKFTE AVAADPNHEA RKSLRRFLNK LAQDLQHDPG MIIKVEEIKR
 DIMGSGAIAQ APTIWAASAS ESLIESAEDE SSILRRKIAE AATSWGQRLV VDDSLRHSLS
 TRITGAAAF ADNYAPEVTG IISSETIERWD AEEASEKIEL MVGKDLQYIR LNGTIVGALA
 GLAIYAISHI LFQA

> aaRXA01322 (1-438, translated) 146 residues
 MKLAPMRMR SPKTFAALAS LALVIGLGQV PIAQAQTEYR TASDGSINWG FRQSFRNYIQ
 TGVAKGSITL GDGASDNGGN FAFTPRTNGT TVTSDSQGTV EFNGSVHFLG HQAEDKWILD
 TTMSDIKMFV NGSSAQLVVD LVAREF

> aaRXA01326 (1-294, translated) 98 residues

LRERLLQNNG GEVIDNENND WILHPVRDDS DRKRLVRTAN DIIRETESAR EWDNFPENAI
AIANDGTGDL IILLPDDDAF YIWSHEDEPL IETELEDA

> aaRXA01330 (1-456, translated) 152 residues
MWKDLTEPLP EACAEGLEIR VVKSPPELAD YAAVLSANWN PPAETVQRFY TEAAEYALRK
NSPALYLVGY AGNRAVCSAE AFIHASVVGI YNISTLEHKKR RRGYGGAITL ATLHTARNAG
CDTAVLQASE DGEPPYRKLG FTDCGRFTEY SL

> aaRXA01331 (1-576, translated) 192 residues
MNIMGDPADG NGWMYAYNGL HSVARHYAWP AAGEGSATAM LFWWPQLLGV GTDENPDQVN
DVDQAARDLN VGYFMISPTW FWDQFIPNFR QIDLLWQTPG VTPVCKKGDS VIFAVNDMFT
DAELDQMRAP GNSPEPLPEL PTLGELGLAE TEDEVDTQYY HRPTVPAGVN SEMPASATLY
APDPTKPTHV PN

> aaRXA01333 (1-1005, translated) 335 residues
MPGGCSGNIV RMLPKSRIFS AILLGIGVAL VVWGLVAPRF VHADGRLPLD LEATTYVLHD
SDAQTINSI PLAGVVTTPV TRQLHFEVMD PASADDATIR IGDSMLRGNP DTQGFQERL
LSATVSSFRI DRTSGEVLSD IALTNQLASP TVQYSVDGIW LKFPTDAQET TYNVVDPVLR
SALPADFVES TEIDGREVLH YRQVIDNVN AEYFADANNT TTLTKEDGGT TTGYFYHNVT
RDFVWDQRTG LVDVLAENID DFYGDRSGQK YEQKLLFDAS LDDAAVSKLV AQAESIPDGD
VSKIANTVGI VIGAVLALVG LAGCFGAFGK KRREA

> aaRXA01336 (1-603, translated) 201 residues
MEPTVKASAR HTIHVTADTW RIRLSASAHS HPNDAYARRA TAISAIGSVL IDVPLQGERI
SESTAYDQGI NADWNAEVTG TDVNIARDII SRLAAVPDVQ VDGPLWLSLD SLAAEAHAVEA
LQGAADTARN TATAIAESLG GQLGALLYAT TDTHSSTPIP ARAEMMAKA SIPPRTLDE
LAPSDIEVTK EIAVTFFELA G

> aaRXA01337 (1-1413, translated) 471 residues
VTFRGNGTGA KHAVVVGSGP NGLTTAAVLA KAGWQVDVYE AAPTGGGAAR SESVLGEGTI
SDLGAAGHPF GVASPAFHYL GLEDHGLEWA YSPFAMAHPL DYGRAGLLET SLPETAKKLG
PDARRWKNLH QGLTKNIDKH LANLLGPVLK WPAHPIRMAK FGPFPALLPAK RLASAAFETE
EARSFLFISA MHSVTPPHKP MTASLGLLFG ALGMSRGWPV AVGGSGRIVD ALNVVINHHG
GTIHCDSQID SLSQFRDTDA IILNQTPSQV LKLGKTDLNA GLPQRMSTWK HGPSSYKVDY
LLDEPIPWSN PQVQQAATTWH VGGSSSEEIF AEA EVAAGRM PERPFIILCQ QQVADPSRAR
EGRHVWVWAY HVPRGFVDKR AALLITAQIE RFAPGFRDRI VHSVDTNAED LEAWNPNLVG
GDITAGSALL RRMPTKIGEK TYMASASNAP GGGVHGMGPW WAAQAVLADH R

> aaRXA01342 (1-1512, translated) 504 residues
METPTQMDV RWLYTQSQLK LREILPTNKT FDVIQISELV DPTDFIRPNS VVLSVGIAFA
ETPDGLRDWA HRLADAGVIA IGFGSGLTFP QVPQALIDAS LHLGLGLFEV PREIPFISIT
SSVRDEQTRR AGRLQQELL L EQERLNSIAI SGGIEALCRA AADYLGGAVT IVDSGGRVAC
SITDDDLDAI PQAVSRLNGS SQALTDATNF GFIRHMTRYG DRHHVLSVLM PTRPTDQHRA
LIRHCAGLAD ILLQRPEAMR DREIEVRS LA MSLLGRSDD LATIHRVFAD ITDASGNIRP
ILITGNTQPS VRKALSSVAT ALYKQERALA HLRLAESTEL LFLRGSRSVH NIVQLFGTAA
SGVRLCIGLP TRAENIDKKL IRELTATAKT LQLGTHAEPR DGTLLWLQNP ELRKILKIRS
RDTYDRLLDH DRTNNTLAP TLVSFTQHS G HIGDTAKELG IHRHTVTRM IRIEICEID
LNDPLTRAEL LLVIATKEGD VEKQ

> aaRXA01348 (1-492, translated) 164 residues
VGFVWGSDDS QIYPELRKME AEELLVGSDV PWGSKGATKT EYALSEKGWE ALRKAWYEPV
TYGPTRDPAR LKAAYFEVGT NGDARRHLRA HIAHFEQQKI QSESMIDELK AKTHPTLARR
LERSPKKEHE RIVAFKVLAY EGQIARAQAE IEWAEEKGLKL LDTL

> aaRXA01349 (1-777, translated) 259 residues
MATSRRAEN IDQAGSEFIE SDSGHTATPE EVVATALTFF AEDGFSETKL EKIAKASGMS
KRMIHYHFGD KKGLYIKAVS YALRLLRPEA EAMQLDSAVP VDGVRKIVEA LYTCITKHPE
AVRLLLMENL HSQDSVDSTA AYSDESNVLL NLDKLLMLGQ DAGAFRPGIS AEDVLVLIS
LAYFRVSNKV TLKNLYSLDL ESEANIEGMK RIVVDTVLAF LTSNIQNSGN SSYLTVVGKT
AEPETDDSVY SFDTDVFEN

> aaRXA01357 (1-303, translated) 101 residues
MSAEELDNYE AEVELSLYRE YRDVVSQFSY VVETERRFYL ANAVQLIPHN SGNDVYYEVR
MSDAWWDMY RSARFVRYVR VITYKDVNIE ELDKPDIIIMP E

> aaRXA01359 (1-1182, translated) 394 residues
MIDSRLAWA YLSKVVEGPN AHLQKLKEG HDVERIAFGI KHREEWIGEG LLKNTDSRYS
IDTAQTDLT IAKLGGRIT PEDDEWPMEE LDHAFGFAAS GMSDHVRTYQ DDALPPHALW
IRGGNLR~~TL~~S AQS~~VT~~LVGTR AISQYGT~~EV~~T REFTQNLVSH QWTIISSGAL GVDSVAHSEA
VRAQGSTIAI AACGLDRSYP SHNRDLFNQI AKSGKGALVS EYPPGTPPQR HRFLTRNRLV
AALSQGTVVV EAAWRSGALN TLSWCAGLGR IAMAVPGPVN TAGSLGCHER IRNGSAQMT
SADDVRSLLG AVGAMDSQTQ YELNFAATPV QGLTRNELRV FDALDDRGE G REAASIATEA
GLTLQLTIFL LIALNKRIV KRDGTAWSRN AEMP

> aaRXA01362 (1-1395, translated) 465 residues
INELILFDVH DLVKYGVHVV GAPQESINFL SAASLYHPQT VLDSFDHDGS GNLPLGKDDN
GNWDRRPHKD RIQLVNADTL TVWKSILEDE QTPYLDTRMV YTVNTEAAAA LEKLASAPRI
KELGLQFSSG WNETTDKKG YFDVWGYPY SWSMAILQGP HLG~~VAT~~PMIK QPNPTMKHNQ
DWSEIDFEAI PANFIPATAY QPDRQTKPTY DADYGTWTFG DKQVPVADTF RIAWREMAAT
TGFRTVYPSV IPPGANHVHT VNSAASRSNL K~~TI~~LVAQLG AILSDYFARS SGSSHIFNDI
VRKIPLNFT SLEKQFARTY LRLNCLTSAY APLWEEITGE PWDVQVPLRN AEQRRAAQND
IDAMVALSLG ISADELCMIY RTQFPVMRRY DQEDHFDANG RKVPKEIIKL QQKLKDGQEL
SVEKRTWVHP QSEVSYTFEY PFRVLDREAD LRAAYAKFEN QLKEP

> aaRXA01364 (1-1866, translated) 622 residues
TGTHLYDSLQ LLFTLV~~DK~~GH HPTDAKAVAF DAEAGEEGLH FRNLSADLFL PAATELIDRV
GLSNEALNKV LENLLLSRVQ SGKDRGFISY ATLG~~VTE~~LQ VYEGLSYTG FIAQEDLFEV
APHGKADKGS WMLPVSKADE VPADSFIEVD QEAPGGGV~~IK~~ VRKRHPRGSF VFRQSSRDRE
RSASFYTPQV LTSFTVTQAI EELQASKRIT TANDVLSLTI CEPAMGSGAF AVEAVRQLAE
LYLELRQEEL EQQIPAEDRA KELQK~~VKA~~HI ALHQVYGVDL NSTAVELAEI SLWLDTMNAE
MDAPWYGLHL R~~NG~~NSLVGAT RSLYAPSLN KKAWLTATPT RYRLDDIAQA IDENKAEPFL
NHGIHHFLLP STGWGATADA KDLKDL~~MATE~~ IKELKSWRTS IRASLSKTQI KQLNNLALRV
ETLWRFVLMR IRIAESQISR STTLWGQEP~~A~~ EVSEVVTREQ IEQDLFGNID GAYNRLRLVM
DAWCALWFWP L~~DA~~VATAEHP ERPALPDLDE WLATLTEILG IDLPLKSKNE NQIVLGPDTN
WLAINDAEAT DLGFSGALS~~F~~ ERVSANHPWI NVARQVAKQQ SFFHWDLDFA HVFAKGGFDL
QVGNPPWVRP DVNFEDLLAE HD

> aaRXA01366 (1-390, translated) 130 residues
VSQFRRCRSP GCGKPAVATL TYAYS~~SD~~STAV VGPLAPAAEP HSWDLCEHHA ERITAPLGWE
MLRVNDIKVD DDEDLTALAQ AVREAGRTVS GLVPEDEVGG NHPVNRSARI AEQKVHRRGH
LYVVPDQDES

> aaRXA01367 (1-402, translated) 134 residues
MPVEVPRHAS RRQAFDRAVL EAYSPLYGIY QKELSNLDIA VDTVPRMRLS ADLAILPDEI
TADGPVPLGR VIPPAIDTKG NPTRARIVIF RMP~~IE~~Q~~RV~~TN AVERHELLTH VLTSLVANYL
NIDPRDIDPG FQDL

> aaRXA01370 (1-351, translated) 117 residues
MGAWDDAILT EEVNVDFLDE ISELDTQDIL EALEDACLLV VNQDNATEDE HLNQAAATI
AAIMFGAPYS AGQVLENYPF IRELVGEGSE ALRGAAQVL EADVEYDLE AYLEALN

> aaRXA01372 (1-591, translated) 197 residues
QDTFVLPTLP TAAGLSPARI VASISTLLDL LEADPSIISD RLEHLADCID EEVESLSPER
DELVNPRGKL RAYVDHARIV HTGR~~TD~~VGLA IANVIAPIWT RRGLVSAVLD FPELMESLPE
LRGPEPITDD IFHDPFIDDE PGVVPFRAVV WAE~~EE~~PGIPD AMAQSCDGPS KGALTQALRL
LVRGQSATY SIEEKDL

> aaRXA01378 (1-1278, translated) 426 residues
HVWISPGASN PIKDR~~LFP~~WT LVKAFLSSPA ALGETVSNRL KKASAPEEKR ALETLSQLNS
AITPQTSQKY QSLLSYLGDI GVKKNSDTRV VIFSERVATL HWLQENLIRD LKMPPNSIAV
MHGGLPDQEQ MRLVDEFKKT DSPIRIMITG DVASEGVNLH TLCHNLVHYD IPWSLIRIQQ
RNGRIDRYGQ THNPSIVTFL LDPAEDSKVG EVHVLERLME REHEAHSLLG DAASLMGKHS

ERLEEETIRE VLRGAQNFD AVADPAEVLE NPAGLDDIDW LLAQIAQADA KAETEAEEAET
 ENQTAPDAAS NSTQHAQRRL YAQESSFLYD CLLEGFNVP EDSINRGGVG FKKHDNDIVE
 LPTPTDLRRR LDFLPQDYVA ARKVKEDLLL ASTLMRGQER LNAARTGEDG STWPSAHYLG
 PLHPVT

> aaRXA01379 (1-921, translated) 307 residues

LNVEEWISDH YLTNDDAKGA SFSKRVREI KEWKTTEDAT QQSGPLTRFS SNRLQLQHAL
 SELDDATTAA SLVASALGYG VPSARHAQRG SDTISYSSWV GNAGSVEFLA ATPAESFEEN
 FRSLPLEPVA VNDKPDITA AKLVGQIFLS DTPPAFVVIT AGKWVLAER ETWPLGRHLA
 IDISLVVERN DTKAQGEMQQ TVVALARENT ERAADGTTWW EETIEQSREH AVKVSSELRS
 AVRESIEILG NDVLTRYEAK ELSTAEIDGG ELAKQSLRYL YRILFLLFAE ASPELEILPT
 GTPEYDE

> aaRXA01380 (1-2016, translated) 672 residues

SLILGCDTKA RLEDLYLPFK KRRKTKADIA REAGLEGLVD KLIDAPSLDA AAQAAAFTE
 GFEDSKKVD GARAILIDRF ALDADLVGEV REQMYRAGSM AASVVAGKEQ EGAKFKDYFE
 FSEPFDKLPS HRILALLRGE NEGVLSINLD AGDDIIYEG IADRFLDTH TSSWLAEAVR
 WGWRTKLYVS SGLDVRMLK EKAEEGALDV FATNLRDVL AAPAGQRSTI GLDPGFRNGV
 KVAVVDSTGK DVATTIVYPH QPQNRWEAV SELANLCATH GVELMAIGNG TASRETEKLA
 GEVADMIKAA GGTRPTPVV SESGASVYSA SPIAAEEFPD MDVSLRGAVS IARRLQDPLA
 ELVKIEPKAI GVGQYQHDVN QVALAKTLDG VVEDAVNAV VNLNTASAPL LTRVAGVTS
 LANNIVAYRN ENGGFSSRKE LNKVPRLGPK AFEQCAGFLR ISGSTDPLDA SAVHPEAYPV
 VRNIAKATGL DVSGLIGNSA VLTCLKPADF ADERFGIPTV TDIIAELDKP GRDPRPEFKT
 ASFKEGVEKI SDLTPGMILE GTVTNVAAG AFVDVGVRD GLVHVSAMSD KFISNPHEVV
 RSGEVVKV MEVDVDRKRI GLSLRLTDEP GAPAPQKRG RPAKQQRAPQ QSAKAPATGS
 MADALRRAGL GG

> aaRXA01383 (1-1143, translated) 381 residues

MNLHSLEIRQ ISSGTISERK TWIFPTAARS FNQNLVHPQS IEIDAQTGVI LAMENRLQRT
 EVESVEYPTD LPNPAWTGPA ISWPLKDPSI DFPDPLPHSI SELPPQSDNP RHLRVSISLD
 AVEGAFPRYR IGDSIRIPLV FARDTPFMSG LETTRRAWIE AATEMDIHNT WPIILTDGWW
 TALSHSDKPI RHEAELKGWF FHSLEFGSEMP LTDLKIERIY GGLGTDFDGA TRWQELDTD
 DAYTENGSWL LEVIVDATLD GAIPPLQPPQ QFEASITHIV DEQLWVLGQM LPVLRCDWLE
 TGKYLQGTIV PISVSHSSRL QFSEGLIHDY ENAWSLNPV RMLAEPQPI EPVIELDVPA
 PWELQESFPD GLYFLTDGKQ T

> aaRXA01384 (1-1716, translated) 572 residues

MRSLSQVLDL LTSKSKVATK IVVERIEKHP VHGLGMMYP PFHPWTDAST LTIERNGTSR
 RASQNGVAVL HQHEQVQTIG LASYFIDSKI WVNELAGLDR INISESEVAG RDVLVLPLSD
 LTLSIDAKYG VVLAEDSDE SVRAVSVEFL DQWVDEEPP AEEVPKYTET REELPPLEIP
 PAPSGNRNLR VLCTWGAMG IPEWKPGDQ VSLFLSFDLD DPPFEQLKTT RRGYTEPGEI
 YGNQRSYKFH ADGWNAVIS KVLPRTEENL TGYFTHSSYA DTSRRTSAVI TAVYRHGKDA
 IIDVTLDGAK PPRYQESLDW SSTSTCDGET IWLSDKSLPF VRGFNVSTGK LVHEISIPTF
 NEIALESNGR ARAAKKLWEL PDLKEATDPV PAIPAGWKLH KRFKGNFHV SADNGTWKQT
 ILRIKPFKAI ELDLGYAKIS TIYQYGERIY LRSDLHQITF NQDLEILSVE VHGNPDAGYW
 PLSDLPPGDS PTLGFFIGSL MMFHEQQDIY AFHDPKTTKQ LTTVNLPKRQ FEVEYASQNR
 IVISLKNPES RLIDKLLVWE PQTRWREQL ES

> aaRXA01390 (1-657, translated) 219 residues

MFRRSLPSNK TSSASSASSA DTSYSVRLGR PEEPGYQPEP SYSEPYTDS FAPAGAAAAA
 AAVAPPMIAE QPQIVEDARR GTLDFGLLI RAVIGVYLIV RGVFTFTLG GSAGLAGLEA
 EFAGYQWPEI LAILLPSIEL AAGVFLLGL MTPVAAAVAT VATSFTTLHQ VNTHEGGWGE
 LSEPLMLALI LTIVVVLQF TGPQKISLDS GRGWQSVHW

> aaRXA01391 (1-690, translated) 230 residues

VAAVAFAYV IDGGVEEASG TPTSSSESV ATAPAASET AEYRAMLAS LDVKGRAPGT
 GYDRELFGPA WTDTVSVEYG HNGCDTRNDI LQRDLDDIQL REGTKDCIVT SGLLSDPFSG
 ELIDFVRGER SGDVQIDHLV PLHDAWVKG QQWDEQTRKN FANDPDNLLA VKGTNLQKQK
 AGDAATWLPP NTAFRCDYAK KIITVKDRYN VVWTEAEASA LERQLDTCOA

> aaRXA01396 (1-258, translated) 86 residues

LKAFNTNFAA TLATGKVGDI TTTVLVAGDD EDAKNALITD VNAGGLDALD AGSLKRAHEL
EAVGFLQLTL AGSEKIGWTG GFGLVK

> aaRXA01397 (1-420, translated) 140 residues
VFMIKELLNK LFGNKKASPA MTQSETISHK ENNTMTTYTI FGRGNMGTAI AGVLTKGGAT
VEHIGSADSD IATINGDVVI LAVPYPAVES IIASHKDALA GKTVIDITNP LNFETFDLSV
VPVGSSATAE IQAQLQPPAF

> aaRXA01400 (1-1500, translated) 500 residues
MAISVSMPKA ISREELERAW LEVIERHGTL RTVFSTGMGG EVQQHRIDVG PGKWIDHAVA
PGESINEALR AVLNRQCSPY SRPSHSLCII DAHPRPTVII GSDHSHVDMW SMLVIVRDL
AALDMELPVE PPLAFESHTA ELLAAPPAPPE RIHQRWREIL EAGGGKMPQF PLPLGDAISM
PERVEVRDIF GVNGLAIIYA RARAQQVSSL ALTISVMADV TAALADLPLR AVFPVHSRFD
QRWHDSVGWF ISNSVIEVPD SDPHTAAQAV REAVSLGSYP LAELLEPWGG MPETPGMFAI
SWLDLRRLPV SIDDIGLQAQ YVSASLRTDG VMLWFILDRS GAHLRCRYPD SLVARENVGR
WIDAIVAQMR AEAGTVNLQA GGEQLTLRHG TRADISEIAP LLARNAADPC ELVDLEHALD
LLTHESSHFL AVVRNARGKI IAAMQLTIVP EFSRGGALHL HIEGPFIIPE YRTTDLKKL
RAWAVEHGRA RGVKVEEVVG

> aaRXA01401 (1-261, translated) 87 residues
MNSPLQHSFA PVPGAQLSTS YSDEHGQAVI QLHGLTSSRQ RDRLLDLDLG RGLSGTRLLR
YDARGHGTST GRAASTDYQW DTLAGDL

> aaRXA01402 (1-474, translated) 158 residues
MGCATLLKAA VLNPDRFSGF TLMLPPTAWE SRKAQASEYL SRAEFLETHG MDAFLNAEKL
HAQPPATVGT PDTVPDISAE LLPWAYRGAA QSDLPSKKEI AKITAPTTIL SWTDDPGHPV
STAIELTRLM PNAQLRIATT PAEVARWPQH LRDDLQLD

> aaRXA01403 (1-414, translated) 138 residues
PITYIDGHPY VDGAVGETGG LMLQPAIDAG FTRFFVIASR PRDYWRKEIG RPGFIKAALR
RFPTIADLTI ARPALYNSVK QQILDLEKQG SAYVFFADNM NIQNTTEINLK KLRASFDAGM
QQTRKDWPEI MSFLNQTR

> aaRXA01405 (1-456, translated) 152 residues
MSKIVDLRYG TRRSSELSKR SAEVFAEAE HPITVTRRDG EALVMSQRE ADGRARLLEL
AAQLITVATD HQGTLAERMA KVFPWMLALS VADREACARE ILDAARASFA TEQPHLALTE
LTSWKETAAA VAAGLSNTDL QWYDDPHLVE RP

> aaRXA01409 (1-816, translated) 272 residues
DFPDVTARLG YEYMLTPHV DFGPFFRHPK ADDDLVAALK KRAKDAGVTI PALLPVQRIS
WPEETQRVAA VRNIKRRIQL AVDLEVDTLN TEFSGRPERS EDEDAFYRS MEELLPILEK
EGIKFNIDPH PDDFVENGIE AWRVIRGLNS KQVGFVYVAP HSFHMGDQAE AILPAVGDR
GAVYLSDTFD HHKSHGLRYI NPPGNAVVRV HQHLKIGDGD VNFEEIFSLL RSTGYLDRED
ALLVSNVFAE DEAADEVSRV QLEKIRSLIE NA

> aaRXA01413 (1-600, translated) 200 residues
LTHLFLELDE RLVLGQQDQ YQWTEHLFRL PLQHLRNSPN DLQGLKIRWC ELYSTTGKDQ
GVLELPQATV VTPNNFEAST LSGLEKLETV EDLKEAARLI YEQGPQYVVV KGGMDFPGEN
AVDVLFDGSS YHVFSEPKIG EERVSGAVCT FAAVITAELA KGAEVVDPVA TAKRVVTRAV
QDAVASNAPF TSVWLAEDNK

> aaRXA01414 (1-507, translated) 169 residues
MAVFDFPNPV NEYAARCTAG LVLVLSAATL FASGDLRIIL ASILTFGFAL RVAGGPRYSP
FGRLSVHVLV PLLKKAPILT PGPPKRFAQT IGLGFGTSL ILMAFGFNVA ASVVLVMLIA
AATLESVFGI CLGCWGFGKL MRYGVIPEDV CEQCFQKES RTGWLVS LK

> aaRXA01417 (1-597, translated) 199 residues
MTDKFDRVLA VEVCIQEWID EQNLTLEVPL MIARLQLRDV AKDITAVHEE KFYDLTDIDT
DAFVKNIKLG WNERLIKKSL FPQPDVHKQH FTETEHGIDA TVTVWSKGF PESGPDFLVS
YVDGLWSADI RNRITKFQNR EIVSKFYFTP EHIKEDGDFS AEIFINRPEN DDDSQDLVEV
WTDQDTRYCG EMIIYFKWL

> aaRXA01421 (1-387, translated) 129 residues
 MTSKSIISGKR PNLPSLTGAR WLAALAVYFL HALVFLSVYP FQQSELFATI HKFVPMQLGS
 AGVTFFFILS GFLIYWSNSQ LKGMKNVLYY CKRRITKIYP MHLIALPMFI EASAKFTTTG
 ITWVLILRE

> aaRXA01422 (1-783, translated) 261 residues
~~FGDSHTSGTN-APFRTDERGC-LKGANNWADQ-LQSQLGLGAG-DLIDVSCSGA-SINSDGFHES~~
 DEVRHAEARG AIGPNTTDIF VQLGKNDQWG LSNVNLLQSV QTCLTDVFAG CGDAAVAAGK
 MQDPNAVTAE NYAERMKPVI DYLYKYAPNA EITLVGYQEY TARSGSQVCV RLGGTPLVKV
 DAPALVSFMN KLDMAIDGAA GILGVSHVDL RSATEGHDSC SNDPWVNGVF DARAEIVGGP
 WHPSVKGDSV TAGILRDRVN A

> aaRXA01425 (1-885, translated) 295 residues
 VLSPDSGITW ALSIMFLTFT VRMVLVKPMV NTMRSQRKMQ DMAPKMQAIR EKYKNDQQKM
 MEETRKLQKE VGVNPIAGCL PMLVQIPVFL GLFHVLRFSN RTGSGVGQLE MTVEQNANTP
 NYIFGVDEVQ SFLRADLFGA PLSSYITMPA DAFDAFLGLD VSRLNIALVA APMILIIVVA
 THMNARLSVN RQEARKAAGK QQAASSDQMA MQMQMMNKMM LWFMPATILF TGFIWTIGLL
 VYMMSNNVWT FFQORYIFAK MDAAEEAEEEE EKRAAKRTTA PKPGVKPENP KKRKK

> aaRXA01429 (1-618, translated) 206 residues
 MLQASLFPIV QEHIDFLHPQ ARKSVFWELA PEVAAKADPV FEKEAWLSTT LLEYESCGFN
 IGYRNGTPAL ASVIFCERDA APGAKALPTA PVSSDAAIIS SLFIDEVFRG TGMESALLDA
 SLMELIRRDY PAVEAFGYRS ENTEADAIAA RRLEIGLIDV EALESAGFEV VADHPVLPRL
 RMELPPATVL LTAKDAQRLQ QEMGAI

> aaRXA01434 (1-366, translated) 122 residues
 VTDGNTSTAW TSTGGDGLLV DLSTPARLDR VILTTGTGSD SNVTSTVKIY AFNDASPHSL
 SEGIEIGTVD YSGRSLSHSI RDSSKLPGQV ESVVILVDEV RSSQTSNTNP QMQIAEVQLV
 GW

> aaRXA01439 (1-546, translated) 182 residues
 MTRYFAVSNL QELGSLEVHK LYKLRVDIFV HEQOTPYAEI DDTDAAPTNN HILVWERADA
 TPTNLIGCAR LAPITAAELK AYTGKGISLD DATPLSQLGR VAVAQEGRGS GLSGELMRNA
 LRLAYEQYPD RDVVLTAQKP LVDFYAEYGF EVLGEEYLDG GVPPLPMLLK ADELERFSDL
 DA

> aaRXA01440 (1-1008, translated) 336 residues
 MKTKWLAIIP FVALAVVACS DTQPPVTETV TETAPQPTSE TAAQPPQPTT PAETTTQQAE
 GINLTTRYTR QNVGHFSSGY QPGQVSFSSA DGTIKCEFRP MEQDAPINRE PSTDWRLSFV
 QGACQFDDGY VVADTNVENR PGFAEYTTAI SHVMPENYTT LPPGTYIDLH TMACFTESAD
 EISCIKYATN ETRISAQGF EMLSNAQRDA ELTTQGGLYQ AFSNIAELRF SDGNAMSCFF
 DAPGSQDFWC QTLSTPGWDD GSNLIHLTVT GGKLSLMGTQ VGNPGLDYFR GRQLIEAPNS
 LLDASLSVTI DGDRVRFRTA TGEEMWVSSS DYGLGV

> aaRXA01441 (1-1029, translated) 343 residues
 MARTTTAHAV LMALSSVGLL MLQACSEQEQ TPEQTPAPTL TSQAPETPQA STTSSASSTA
 TPIATPIAAT ELDYLHIDPA TYDIGVQDQE TAVFTTGDGI TAQCFFEATP GETSYQIKEF
 DFDETAGTCA FGDQHISVTT DENVRERFAE LSETEEELPE AQATLDVGEM VHLGHMGCWA
 PSVSEFSCLD FASNQAFTMN EQGFHELDPA KATEQLINSS GQVQTLKMT NFQFTDGTSI
 TCVSELQAEF FLCHNSGPGG WSTSAGPANT LWWNLNQADS EFEGARPTNP TQSVYKSQOI
 FGPGSYLLAN GVSAEFDGTT LTLTPQGNQ YWANTHDFGA GTH

> aaRXA01445 (1-993, translated) 331 residues
 MIPLINVRFP VAALPLALVA TVWLNWADH LLLTGFIIVYL AVEYATSRGR FALALILGVE
 WILIAYGVAL ERPLEAKDSP SLITEILLIL VAAGTGAGRW KILSERKQRA ITQQEIIKKI
 RTDIAHYLHD SMARSLAIMI VQSKLTELEP DPKKIQEKLN SIAKIGQEA ADLHQLVRHL
 VVEESAEEKAT AFGAWAAVSI HDTVNSAIQL LVDAGHVVSF DSRKKNYKLD HIAETAFALA
 FNEAVCNAIK HSPPKANVTI RITEKAQSLQ ILVMNPIGDW HANGESAIPG VGIGVESLTR
 RIRNIKGQVC VTSLQGYWKV VISLPLKCED S

> aaRXA01447 (1-849, translated) 283 residues
 MRLLVLRCD A PHINEFPALS TSVEIHDLPA VPTRKDLKIL DDVAFDVLPO DPTPSLDEIA
 KQPDVEHLSS PKFAPQQPET RLRIVVIGSD AALSAVLTRL MRADNLWAEI GFVPVGPSTA
 AKNWGLPADE AAALELALTG LVNPAPLIRD DVAVAVAGSA TITNWEPEGI TGEVIVDDHV
 LIRHEAASKA PRRGVYGARL VPMLDAPGIA AVIMDTPLPG EVPSRSLFPR PSGSVIPESF
 STGRAMQAGG PSLQIRVDGI SRKRKVERVT FYRHLRDLQI VRP

> aaRXA01448 (1-780, translated) 260 residues
 MAIGGILIAT MFPPGDGGSI DRMIDAFIGG GVGILVIALL PSSPLDAGRQ QVANVLGIAA
 SVLEDVAASL KAKDAAKLNN ALEALRRSQA SVNKLETAAS SGKEATTVSP FLWGDRARVR
 SLRILAPVD NVIRNARVLA RRAVLTEDN DTVSDEQIHV IEEIADIALR LSDLYEHHKE
 ISEALEIPEL VNRLRQLGSE VGEDIAEDRV LSAQVILAQS RSIIVDLLQI CGMSRESAVA
 VLVPTSESPA YPELWDDDED

> aaRXA01452 (1-279, translated) 93 residues
 VIRSFADRD T ELVWLREGAK RVDPRIHKVA NRKLHLLDAA TTLDALRVTP GNRLETLEGD
 RVGQYSIRVN DQWRICFRWN DSGPENVEIV DYH

> aaRXA01456 (1-522, translated) 174 residues
 MNDSIFSPQA LNKAMLEAVE FIHAEGWDAG PTLFALVPTE MLVDTLDEAA DDSPLTLVVQ
 DNLPDNLPLG SEALGDYVSR LAWPAEIAAG VLAQEIMFTD AAVAGSEPRP ARLFSGVLRG
 EAELTLLQLR PTEELAERG PFAEDEIELR GPGVAPGVI AALRYTLEAD PDEI

> aaRXA01457 (1-675, translated) 225 residues
 VASTPHKHVR VALGLVALIP LLAAGTGGGS TETSTESTAE TTPATTTEAT TTPATTASSS
 VIETTESSTA ETSTKESGET STSKPRMTKD VEVAYKAFSS LAPVELFEQF ETCDPGSGVED
 SFACNGPEVG QFQFFDNASK ATSTTQLLTE LRSSRVVEDS GSKVVGWTTI GTMSIITVVD
 NDQGLVLQOM VSSDKIDPEE RIYELGLSTP KDTEESSEET SASKN

> aaRXA01459 (1-810, translated) 270 residues
 MNSNGFGFSF GNNDDDDDKN RNNDPFGFLG GNFSGFGQGG AGGPGGLGDI LNQFGQMLSG
 MGDSMNSPEA AGPVNYDLAA RIARQQIGRV APVKDSEKEA VEESLRLAEL WLDNATQLPT
 SGHRVEAWN P ENWLENTLPV WKRLVSPVAE QMNKAQLENL PEEAREMMGP MSSLMNSMSS
 MNFGVQLGNA LGDLAKQTLT GSDFGLPISP VGVSAVLPGN IAEASKGLNV APQEMLVYIC
 AREAANASS STCRGLSSAS FPPLRNTPSA

> aaRXA01460 (1-294, translated) 98 residues
 VPWLVERLVS SVEEYAVGLE IDTSHIQEAM GNFQMDNPDP ERLQEMMNEL QGMDLSPRIG
 SRNANAVSRL ETLLALVEGW VDIVVTQALS ERIPSPT

> aaRXA01463 (1-1164, translated) 388 residues
 MEMSYFSHQD PNNPESHINF TMAQMEIQRW TLLISNPEAD ASTLVMELKT VTGESKHFIN
 QAINAMWALM KLPILRVVVE THFHVRIPLY ARIMQAVKQA KPELWDELHD RIAEKLTPRI
 AGQALMEASA LAGLITRWIK ELDPTFTGKK RGPKGSDGTL TFRHVDGRTY ISGNIDGVTG
 KLFQKALEKV KQKGEDLARA LVTFLAGRTK VKIVSAVYTP LVGGVSWIPG VGFLSQEESR
 KLGKTASKVI DLDTIATRVE NGYTPSPELR LYVMGRDGTC RHPGCTVSAD NCQIDHVIPF
 GEGGLTVAWN LQCLCAHHN MKTDGRIQAA IDSMGRVAWI GPCNRTVVTE PVGPLAQEMP
 TGQWGQTLEA RMEKTFEKLK SSLEVLDD

> aaRXA01469 (1-1032, translated) 344 residues
 MAFADIVRSV ENRTNAATLN WSIKNGWKPE VTGFSGYGSG RRVRLARVL MSNPENLLVD
 APSQSITQQA QRGWRQFFTI QVPNLVPTVT VGGKTVTSST NDNGYVDLLV EDHNLDPGWH
 TIQIQAEGST PAEARVLIVE NTARIGLISD IDDTIMVTWL PRALLAAWNS WVLHTNTRKP
 VPGMNRFYEE LLKDHPDAPV FYLSTGAWNT FETLQEFINK HALPDGPMLL TDWGPTPTGL
 FRSGQEHKKV QLRNLFIEYP DMKWILVGDD QQHDPLIYGE AVEEHPNRIA GVAIRELSPG
 EHVLSHGTTA SLSTITTNGG QGVVHVHGRD GYELLQRYET KPFA

> aaRXA01470 (1-426, translated) 142 residues
 MTNNALTVP T RTRHQADLLT ADFWEDMGLP QLKTTEEESI DDVALPMHTA VLEISGMPKE
 LRQTVESAMV VCIPSPSELS GSNRDPLTAR WFTAWRRDPF ELGLTECREV ITGTPRELDK
 LRGVLESLAD EYRFEVELRI VD

> aaRXA01471 (1-807, translated) 269 residues
 MQSFKTLESW PVDNVSASVI SDGAVHFYGD VDRVFELMSV TKLLATYGFL VAIEEGVFEL
 DSPMGPEGST VRHLLSHASG VAFDKPVAEK GVGERRIYSS AGMDILADAV AAEAEMPFAE
 YLREAVFEPL GMENSELWGS AGHEARSTVA DLTKFGQELT APTLISPETL AEAQVQVFPE
 LIGTVPGYGM QKPCPWGLGF EIKGQKSPHW TGDLMPEA GHFGQSGTFF WTVPGSGQVG
 VVLTDRNFGP WAKPLWTAFN DEVWAEELNS

> aaRXA01472 (1-456, translated) 152 residues
 MNQANLPAEI ADLSDETALW EIINEYNWDD GFAVPLAVVR HPKCDRALAL RLFWDIDETA
 QIHHSDEESA IAELYASTAE NDPAEFDRIM DYCTTLVEGL RKQTYPRGAN RFDGTGFNLE
 DPSLTDRQRK IRAGKTKFAL KNFEEAFLQP EL

> aaRXA01473 (1-765, translated) 255 residues
 MTDIGDVDQI VWEFIHFHDD SINPFFEFIK SDCINDEAIE RKTQILGIIL GNEPCGSVIH
 ARQNTIKPMS HTVSFGDGWI QVLEDAEETV SITDTLDALR FSPEQAEWAA EFGPLLCGPA
 NQPPAYLTAL DGHTKLPLSP QLTEFYSYAR SWTNSEALGN VIDPDDYLDH LTDPRHLQD
 LLDNEFERVG VLVDKQNRPL DPARCALFSL DALARAPYNR AYFVFAAPEP EIWAFENEHV
 HAPDLRAYLQ ARLST

> aaRXA01474 (1-546, translated) 182 residues
 LVGIAYARFP DTRDDISIRG KARSALEKST GLKERFARHF PAISIPVDTG DAADILVSGW
 WLSGSKKKIL TAAEIQTIFI NRLATGPLST QLETATGLKL QVVTNRERMK ITLIEPKGTS
 GHAI DPQAGK GSRGGFLLDN GQEDDYDDVD TVTIPDALNV IGYILTHGTP PQEGWKVDVL
 ER

> aaRXA01475 (1-426, translated) 142 residues
 MSIQGFSAAG YSACFEPRID AWVDIRGPRK PEWLAENIDN PLRHWDGNPH IPVSAKKAG
 NIYKETLRMT RASTKTPDQD PLKETLRSFI ASINQLAAKK NFIDAGVRED IVVALEKLCE
 AAEASPEEIQ QAIVMGEEFI ED

> aaRXA01476 (1-342, translated) 114 residues
 MSDSPCTVVI LNRTATATSI LRDIKALTGY GLSEIRSRIV AGLPVVIEEM FSNAWYDERA
 QLLLALLTKW QNEGITFEIR EVAEDDPIEA GALISLEVLN NIEFPDDNES RDGI

> aaRXA01479 (1-228, translated) 76 residues
 VIGAAAGYVL GTKAGRKRYH QIKKGYEAAI NSPATKSAVN AARKAIANKL DPQPRMKEVK
 NLRTADGHEV LEQDQD

> aaRXA01484 (1-546, translated) 182 residues
 VLGTAQYDGV PSRQFAARLR HAAKLWRLHE IQHVTYVGGK LPGDRFTEAE VAREYLIKEG
 VDPDLIFVSA VGNDTVSSYE ALDPEKLGRV LIVTDPNHSY RAVRIARRMG FDAKPSPTTY
 SPAKFPSIVY FLTLSEWGG VVVQDVSRLI GERVPDKVKH LCAQSKVCCA LRGVHAMSNF
 GG

> aaRXA01485 (1-2052, translated) 684 residues
 MNFSLVHLRE NVRRVSVTV AIGAGALLISG PFFTAHTAEA TETYVLAESP EFYQDNVTDY
 TGQISSSDIT NIQAAIDDVK ASEQKVIFVV FLSSFDGVDV ETWTQQALQA NGGGNVLIYA
 LAPEERQYGI QGGTQWTD AE LDAANNAFQ ALSQEDWAGS ALALAESVGS SSSSSSGSSS
 SSDFSGAWLA AAGVGTVAAG GGIWAYSRSR KKKTSATLE DAREIDPRDT NRLMQPLMET
 LEHLAQEELT STDDSIIRGK EELAIATSEF GPERTSRFNR AMNHSTGTLQ KAFEIQRLN
 DSIPESEAER QSMLVEIIS CGQADDALDA EAQNFADMRN LLINAGSKLD ALTQKSVDLR
 TRLPKAQETL AGLRTRYSAE VLESIDNDVD LASASLDEAE EVLPQAYEIE SMPAGEQGGG
 IDAIRHIEHA ITTADKLLAG VEHADENIST AKANVADLIQ EISDEINEAG QLKQSAGADG
 ARADWASLDD AVRAASAALI TASADA EKDP LGTYTELVDV DSALDQLDT LRATAADQAR
 QLRVFDQQLQ SARSQIQKAE DLISTRGRIV KSEARHTLAN AQKLYAMAQQ NRTRDTRAGI
 DYGRQA AVAA QRASKAQND ITTYNNRHNS GGGTTGAIVT GMVINSILNS GRGGGFCGGG
 FGFGGGGGGS GGGGGGGGFR GGRF

> aaRXA01488 (1-831, translated) 277 residues
 VLLETGAVND LALLDLFGAP EVPVYLGEPH AQTGDGFEVL EISAFIHGQN GIGEVLEPAS

ESKALPGAVD FLIDSVNTHG DDLVIIATGP MTNLSAAIAK DPSFASKAHV VIMGGALTVP
GNVSTWAEAN INQDPDAAND LFRSGADVMT IGLDVTLQTL LTKKHTAQWR ELGTPAAIAL
ADMTDYYIKA YETTAPHLGG CGLHDLPLAVG VAVDPSLVTL LPINLKVDIE GETRGRITIGD
EVLNDPVRT SRAAVAVDVD RFLSEFMTRI GRVAAQQ

> aaRXA01492 (1-804, translated) 268 residues
VTTLWAVSD LHAHAVKANAD PIENIQPKDP SDWLIVAGDV AERTELVLEI LARLRRRFAK
VIWVPGNHEL-FSRSADRYQG-RDKYSELVEG-CRKIDVLTPE-DPYLTFGGVT-IVPLFTLYDY
SFRPRGFTVE QAVQAARDRQ VMMTDEFSIA PFVDIRAWCW DRLAYSIKRL SKINGPTILI
NHWPLVVEPT YQMRWQELAL WCGTRHTRGW AERYNAEAVI YGHLHMPGIT NVNGVKHIEV
SLGYPREWEH WSGQHVPYP VMEVDNAG

> aaRXA01494 (1-996, translated) 332 residues
VTDNSQFHAA SALVQAAHTV SVVGHLPDA DAIGSVAATV AALQQLGKDA VGAIGQLDSM
PENLYTIPGA SNIKFGDSLPE ESDLIIVVDC GSIERTGAFE SIIVNNPDKV LVVDHATNP
GFGAVNLIDV EAESTTILY DWFDAMSVQI TPDIAHGLYA GLLTDTGCFR WGRPVMHDM
KELMEFGLDI RAISSALLDQ TSVDDLRLVG QIVSRIELRE AGPYTLAVLV ADFDTINGRS
RAVVEGLIEM VRAVEGADFG AVFKEYERGV YTVSLRSSNL SVASLAVHLG GGGHIPAAGY
TARGTEIEAL DTLEATVTL GESLRSSAHV DV

> aaRXA01497 (1-918, translated) 306 residues
MVGKLPIMAE TNENDLPVID LAQIEGYVVD DSEDDDPVLL RPDGTPIETW REDFPYEERV
TREDYEVKVR SLQIELLKWQ NWTKETGQRH IILFEGRDAA GKGGTIKRFN EHLNPRGART
VALEKPSPRE STSWYFQRYI QHFPAAAGEIV FFDRSWYNRS GVERVMGFCT ESQHAFLRE
VPMLENMILG SGISLTKFWF SVTRKEQRT FAIRQVDPVR QWKLSPMDLA SLDRWDDYTR
AKEEQFRYTD TDESPWITIK SNDKKRARIN AMRYVLSKFD YTDKDYELVG EPDPKVVLRG
RDQIGD

> aaRXA01501 (1-288, translated) 96 residues
MKEVAVNEVP AGAQLIDVRE TDEYAEVRAQ GAVNIPMSEF VGRIDEIDLD RDIYVICKLG
GRSAQVAEYL EQRGIEAINV NGGTDGWVAA GLPTEA

> aaRXA01504 (1-609, translated) 203 residues
MNITWLILAG VLAIIAVVFF YLSAQKKKSE PQPPRQRQDP LKFADGSDF NARILPGAI
ISRGGVYDVC RGAIQFRQGQ YIWHEYLLDG GKGSEYLSVE YDEGQLNLGW WITRPDLAQ
PAHDVTVEGV RYRKTESGVG TFTSEGTGV ADQGEFEYWD LAEVGGNRL SFERYGKDSP
FEVSLGWTVL PGELTVYPAP EAS

> aaRXA01505 (1-498, translated) 166 residues
MIHHIDCMPT DVSAEALGVS WNGESPEVLV DKLIDASPHP STCHLAVIGG SHVVTVETPD
GRFREEISCH AQEAEDSRWP LPDSITRENY LLQTNVAVLS EEDFARAAEE ISNGDDDWLI
ASFPGAGEHH LTALTAEFLE DVWEWFSSHLL YPEELTIVST RSIYKP

> aaRXA01506 (1-411, translated) 137 residues
MSSRNYSIG FILLFLAVLC LFAAVFAKPA VGSQVSDRWP GNNGTYSAG ESGVVDEIVN
MSTPTDRATD PATGDTYLR SKNLIISGE GTPECTITVE GLDRVNSGAF IWLGGGFGPS
SPSSSSGGSS GSGGGVK

> aaRXA01507 (1-423, translated) 141 residues
MSQYLVDGVL GTLSYFVLAA VILVVGfVIL DLITPGKLHE LVFVHHPNA AVITVAQQVS
IGIIVTAVL TSSDILSEGL LETAVFGALG LVIQVVMAV LEAVIPGRFR DLVEDPKLRS
GAVVAAVILI VVGTVNAACL I

> aaRXA01518 (1-474, translated) 158 residues
VAFMQKTSAG WLIATGGFLA AVSAILTWRf YGSMTSISIT VSITFWLLAV VCGFAGVKVQ
GRLEGLIGQ DKSQMNPTI AYLAMLGRAC AWGGAIFGGV YVGIGSYVIP RAGELSAASN
DLPGVIACAL GGIALSAAGL YLERSCEAPP PQSGEAS

> aaRXA01519 (1-747, translated) 249 residues
MNQDLSHEDS GDGNSVDRGQ ILLAVLIGLA LIASVIMLLA NSDGAMKIAL LAALWAAIIG
FFLVYRSRKQ VEAAAREKET LEYAHQSELN RLEAELVQEK MEISESRAR DQETLEEIKL

QLEEMRTQLS ELSGREWGYE PTMLRAEARR ILELESQQLS QQFQAPQPEV PEPVAVPEPM
 PEPAPVPEPV PEPEPVEVAV EEEEEPAPGR RRRRHAAPEE TGRRRRKDER QGGLSVADLL
 AAARKKENN

> aaRXA01520 (1-384, translated) 128 residues
 VASALDELGE TIVGLLVGEL GGSIVEIADD KRAQLAAALT YAGFLSTLQR DASYFLDEFL
 GDPDVTSDIV MDSAQQFQAL PSLDEVIAQY DSINNPGRQR LFRDLARRQA EISRAQDIEL
 WAIQKEDR

> aaRXA01523 (1-951, translated) 317 residues
 MKNWQEEFQL VNLTKLLHSD TETSAAISNG QMIKLTHEVA INAEKYRSLP AWDKAAARAF
 AVGMTVDKAV VAGQSAARLW GYQTLTVEKT VLCLLPERLR SKSSKHWPSP MRYKDRYLSS
 RDIREVHGIR VTGAFRTFLD IALDDGVVAA VVTIDSARRQ NPSLTREKLM HSAESFPRHR
 GVKAYRQAE LSIPNSDSAQ ETRARLILRE AKLPEIQSVK VQARFDQSHN KYFLVDFLIN
 EWIIIVEIDGR SKYDSPELNE VLMAERDREK FFLNQGYAVL RIDPKQLDLN QDGECEFIGI
 LKNTLQKTPP EHLKQAA

> aaRXA01525 (1-1722, translated) 574 residues
 MRSFQSILDL VNSASEVATK IVLKRFEKRI TSETDWVPYQ RFSLWSVGSP LTIERKGPDV
 RVSKDNTAVL QRYQRPEAEG LISYFMDPKP WITELAGLNL DDVSEDTVAG RTVLVPLSN
 VILSIDAEFG MILTAENDIE KIHAISSVELL EKWRSSHYPE PHFPAVLPP ASTGNRNLRV
 LCPEFSIPSV NVGDQVLLFL TFDQTLPPVD QLETTTRGYT DPIQLDYDHR QYRFHADGWD
 AIISTVEPLH DEEELTGYFL HRLDPDSAYP TIAVVTAHY HGTDALIDVT LDGVHPPKNQ
 ETLEGISTST SDGDIFWLSL ESLPFVRGFS VSTGELLHEI SIPTFQEIVL DSANRARVKQ
 KQWPHDFSDC KGKTWELPDL KEVFEAVPSI PAGWRLLDSF GKNLHNVTRE NPRLNDNFWL
 QTILRLKPFK AVDLDIGRSI ITAIYPYDGR IYLRASNHHI TFNQDLEILN VEVFGDPEVP
 ESGLIYLPFG DSPTLGFPTG TLMMFHEQEG TYAFHDPETT EQITTVNLDR NSFSVAYSSR
 TKIVISLKNP ESRPTNKLIV WEPQTGWREQ NLER

> aaRXA01527 (1-2511, translated) 837 residues
 VIPNPNPNPK AKTLRLVSAL TAITVVGFSF SPVHALPIPL DPSDPAVSEL WVNPNARADD
 ELSGVDVEIS DFVMPNSNLT VQVGESFKAQ VRVTNRSET LSNTLQARR AEASFDMASA
 RVAATDNNYG YFGAMVTLDD ELEPGESVET EVEISTDSLS ISQPGSYPTM LALSGQLDGV
 AQHLDQRFL LPVLSDTTDT EDTATPTMI YPISAQTNVL GGETGEAPEE PPLLSSDAL
 AGELDEGGRL QKLIDAYLQS SPAVQQATCL AIDPQLLDV DRMTGGYTVT DTRPSTVRQN
 QRLRELWTAD NQPTNGVAGT GAENAAIFLE KLRQATATSC TVALPWANAD LNAVSTGNQ
 WLMREALQRG VTTFEEVLGV IPESNVVIPG NGFVEPSTVG DLGWAETVLN PDQAWEVQSE
 ELVAAPDATE QSALDNPKPT PGTVTPPTPM STVSVLVSDN TVWRTTSADR FHSLAPGITG
 VSYQGSLSAT LATLGQNPET VGYSNPDSRY DYAMDESAR NLTGQAALRL TVDNGDEDS
 VLIMPSAVLG AEDGAMLET TGALLADGSA RPFSLQQYVT ANAEQRNTLA TATTPPDSTA
 FGAPYDDPAS LTETEILRTT QQAIEYIDDLT GIMSNDPSIA LTRYGFTAPL RQDLRLALSI
 SERRSLARHT QATSAADKLL NNRNRTLQKL RSSVALLPPG NVYTRTSESS PLLIVAGNGL
 PLPAETQILY SGNQDAHINT PGVVRIPAQG SITLQMTADL PDDNLRDLT LWLASPDGAT
 ISEPVEITVQ PRPNLGTTLF FVAAGILAVG GLLFIRKKRN VEKRSPTGTS PKPPPTH

> aaRXA01536 (1-1242, translated) 414 residues
 MAFGFFSRRK KKNKDKNPNE NSAVPAHSED SPQEVFEGNG RQVGDPYEQ VDRDAKGRLT
 AADFLPDADL PQLNRSRANM LRRELEYRFS LQNAHINIDG NTAMIQRSDG GAAHVSRLTL
 AMNAAGLDNF DQLPELVESF VHGTADATL NDLSTADLYK ALRLRLPTP GEGDDLVEHG
 LDRESQIRDD SILRTFTSDM SIALVLDTEH AIRIQPLKEL EEFDDLSALE RAADRNTWQE
 LYDANVDASF VDAESDSEGS SFWAFESNSY YLGSAPLFLN DLLAKWAPDL QSDGVIFAV
 PDRDLIARP VTTGEDLMNG ITAMVRIAMR FGLGNPTSIS PRLHLLRDNQ VTTFTDFRVV
 SPEMEAWEED SAFDAPPAGA IGIEVRDPY LMERLQGGF GDFGDFGKPR DLDL

> aaRXA01539 (1-1923, translated) 641 residues
 MSSSDLASII GVEQQPVAYG ESEEPETLRD VLPRRKLHPS EITPSYEVAD GEQRSIFGES
 APSDFDDLSD VEEFDTSHWV RAGQDDRSDD DRLADEAGVP PSGAQDVADN EANLSGVDEQ
 LHMREVHAQS FDPIDVAKKE RKAEEKYAK PPKSDNPYLA RDAKDAAARK RKINAAHDNF
 AQEMAQAAMG PLRKGVTQT VMAACTTAAV MWCMSPRMTG VNVDMKRKFEN KDLEQAKDTK
 LSKYVSKDFW KSKLTRDKTE KEAKSLSDAF MQQKTAIISN RERIPMSVAS AAQTVVRLSD
 QAYEAMREVD TDGQAIVDK DVSAQVAEDI DMVVKQGEH GLKSKDIYGA ARDIVGRRME

RDPGYAARFN ETAFGTVRLG EQRRGMVISK TPTWQFPDGA GLSKNAGWFS VREPMGNAQN
 FADNLAATLA TEMRVAGEQY GSDGVRDVVA GFMTATDVSE SGLASAKKLL PDFDTRGRSA
 SRVRQIAMAQ RTQAAIKVLQ DDGNQTAMTT EQVKEVQVWA MDQAEKVMQR DHPAILDKEFV
 RKHGQTFGQD ADAFVKISITM EKDTSSSEYTD AMVRPQENRG SGRELAARRR VQAAQINQAA
 QLDNMVHDFR ESNLPEERPA NPYEAYVRET EAKTNDPQYG Y

> aaRXA01540 (1-702, translated) 234 residues

MTFAELSSPR-TIIAFNGRAE-SGKDTAAQYL-THMHSFHRIA-FADGVRDALY-ALNPLVCVEQ-
 AITTHGAIYD RVATVVDTLG WDTAKQIPDI RALMQRIGTE AGWRIHGEHL WVNLAIKKIN
 ELPADHAIVI TDLRFPNEIE WLNSLKANPM NTIQTVKVIR PDHESTLTAG SFGTTSHISE
 SFNLTTDTVL RNDGTIDDLH SKLADFLSTS PQPVLSRNAP VPKHNAPAPT TDAM

> aaRXA01542 (1-5061, translated) 1687 residues

WGQKDHWGKA PLGDHDAVRI YRQAEALMKQ RAANNKGLDL NDEATYGAIM FASFDDAFAA
 DAEAHGCVHR PQFAKVTRRN ILNSPQYTAI KSSYDALVQQ DLVAQQQQAQ ALQQAAYEQE
 QAAIFQARDQ ATFQAEQTLA QESVRQSEGVP GLPVIDPMES YFREYAFYEG VEMFGTWGTH
 VDAGVSQFST SDGRAIRALV DEHLATYEPV EQRGSTQAFF ASVNAAFAEV APHAAPMFSA
 IAREGEESKG YQALRHRFDK MVGTAIGPNG LPEGPDLGGR RLPISPYDPR WSDREVVRVH
 GTKLLSLSEE SVGMIRDLDL ATIHLQDNDV YEGTHREDDT KGGVRPLTQW VNGEAIWRT
 ITENDQMRPL NIGQFMTAKE YRAAASWLRA GLIDTADVAS QKIDPNKVMS DEGIARSEAI
 LTYLSDEGVD FRIEPPDREPQ QLKVRIEGTR IDIRLTDTRA NEQWVGRVYD SGTVIKYSAE
 QTAEERLRAR ERMENGDGWT TPATDYEPSP TEVVDLVKFA LGREVERQDG KGLVGVPNAR
 HPRALEQAQD AYFTKNRSFA MVREGLSIVQ DARDRSAGPG KWFNDNEAKAS EWLGNNIALT
 RARVAEELGV EELIALSAQY ADDPDFMPAF AGEDELMAIK QDYWAMLRGE ETDLLNPGVN
 RDDYMAAIRD GDHEQIAAMT SAMNAVTVED RVRQHAALVL DDYVGTVEPD PVTGLRFNPV
 TVAQHMPSAK SLWSNHDDII AALRATSITG DELRGDEFYN DVINQQLLKF NPETAQKMN
 NPDLDLPQLAR FGTVIAETIS RENGADVVDIA VDDNGVVRWT AQRRVGAKDS RAVDSKGQVR
 GERTRHVQGE IGQIFTRGEH GEIVTKFNGG ENYMFAPGYT ASVVPQKPGE TKSLEERTKL
 KGYEQVMSEA LVYRVREDLM FTERSRVGAT TSINSAYKRL YDNRFPVDFE ERSAAEGLSD
 EWRAALLETA SLRVRYDNSI RDGANVMEDI RAQQRGFDA NDNSRDALVL TGGRNISVL
 VDAGKGFFDP MMTGMAANQG SVRYLLPSAK VGADGMITPG DPADRVPVAA HPESWAMGFD
 PHDRQNMTFS NIMQASAVTG GARTAMIQLG GWNFEDGIIV SADFANTHVI RDTEDEMRPL
 VAGDKLSDFH GNKGVTALVV DPAMSDADAR AAGLESEVAF FRDNPDLVV MSPFSAISR
 NGGTARELMT NPQDVVFRNN DGSTRVQPGA SGDLNFIVTH MAVDAKTNVY DEEAVREGQG
 RKASSQLAWT LQAQECHEIM EHFYGNVSA LANFQEYLRV TGLDVTYPGE LREGFSESNE
 QRNIIEPMSI YDENGELNNR VNRAQVREAF VEQISRAGGV MEIPFQLQLR NGAQLEESPN
 NPDMYQLPLL SPHLRSDEDL ADGSTSRHEY TTRYMAIFDT CYKLAEQAK IDALRQEEAQ
 HGTLPRAAEK RLSESQKFVD QAQKKVQASF DGIANDIVAS RIETKNNVFK DGFMSARQSH
 SATAVWTGDP RLSVDEVAMN SSMARELGVL DNGYAMVWRD PVIRDGGVRY LRVVINDDLH
 GVAVNPVSVK SFDGDFDGDS VGLVGNLPKK AHEEALSRLT VEANMLDLGD GKRMEDGTMF
 YGLTLHDSLD VQVAQHHDPA MAENMKVIVS ELNRYQREYE AGEISREELL EVNRAHMDLL
 NEHYAQA

> aaRXA01543 (1-2766, translated) 922 residues

MSLKQAIIVR NEYTIKQANG KGSRGSSPGK YISGYMARSD AVEAVAPIVR NKLDDEFIMRY
 MARDSAVEQL TTDSNADYDQ QPEMNSRRGR QGRRATLKQR RAERSARRAA LRAVNTDSD
 TTNPSQPVHP RELAEFTTQD QQRVHDLMLR AQNGGVAFG YGDVSLSHDD LHAASNNVQE
 LYENRHTVMK VVLSFTQDYL TAHGLIPEDL DIKRAQDYRG QVDQMKLRMA VMHGVDRLAQ
 RHYDDLRYVG VIQVDTKHVH AHLTMVDAGY GHRAADGTQK GKINKPGKAI LRRGIDAWLD
 QHQHMAHLSA AVGYEKRNVT SYVKRWAFHQ LTQESAAQFV VACLPEKRL WRASTNAKEM
 DKPNRLVREL VEARLGETDS PMPAALSQVY QYAQKRRVKE GLSKQDTQRL IDNGREKIE
 QAMNGVYSVL SAISDEQRDV STAMLTVMRQ DYEDLLDGLA RKKSQDLDEQ GSSGSQEVGK
 EEPEPSIEEF GLRLRSYSAR LNHHRQREA FAVKKRSWED ANSQGLADPT SQVMWSFYDT
 EEQYHAMCQS KYQHFLTFAP PVGQWEKQWA EVADYGKRVV GLRALRADRS LARMSDERAA
 EALGRQLYDQ PGGGLLARTG AEGKAGRAVL DGRIERMMVT YQQKIDDLRR EWAQLGARLE
 VEGDAVLMDA ADLRESGGEG ADERQIQQQT IELPVADVSD SVRTYLDEEL RDSRDVSAHD
 PVHTLRGRFQ VVFRPEHDFE QVGGPDRLDL HYAWFSDQKV SQPIVCSYGE LVTQRRYAFE
 RAREWMISSQ QEPEAVAEEL DHAGADITRM EATSSEVSRT GILRSAMLAR IREQARQRAQ
 RAAEEQARRE RELVAQRQOE IDQETTQPAF EVVQRHVQPE SVQIKRGRTV ALDKRVQPLI
 RDAVDRAVL D SQRSTRDGG LG

> aaRXA01544 (1-600, translated) 200 residues

VKLDDAMVMI EQRLVKGRGA TKTQLAPYEH IQRNIAARGL RADDGGSCFG YGDASLSNDD
VATAAEDIQD LFACGHTVIS AIVVFDKSYL SEHGIMSFDY NYFGQDIYAD THPEIDLMEI
RLAVMNGLLG LEGTFFEDMR YVASIEVSRS YVYAHIMMAD AGVDDARGNA QVKITDTERV
LFRRGVESRF VEQEARNVVL

> aaRXA01545 (1-1251, translated) 417 residues

MKLAGFNTNS PAARVAAEQG EKVLQDAPVY AVFTPDVVEV EFIGTQHEPV LHVEGAIDSV
TALSQLPYDI QKITFDSENQ QRFSGFYKFS PQQHKELIDK GLYLEGFQPP REMMTSLPWE
LPMNADVTVV APESQDAPPI VLVGLSEIHG VDFSQESSGY ELTSMFEDYR SQREAGEADK
DFSESISRAE IEGKDIFADA NRTRTGVSAAH AQRLEQERAL SAAQLMAKLA GISFQTEPVL
VGAEESFDAE QFLAHDLDLT AGMSEWEREV TEFYNEKIRA QEPVVEREAE RDSDIETEVD
AAPTVSAAEI NDVIHDLDEL EFDDVIDLDA DDVVNTAEVE APASVSAAEI SATELDFDRE
SRAKTAQREA SRRVAQKIQT QESVREAYIR EQKHGYDASP AEGRKFDKI AERGLDL

> aaRXA01546 (1-696, translated) 232 residues

MARAKNKKQR QLQHAHDAAQ AEIAEAVAVN TVEPINARTG GWPSWVDKVV KLTGSLGGWF
AFLVFAIAVW PVAILAAGTV VTIIGTWGVS VLPISLVISS GASAGVIIST TDGFLFSWVI
PVLFLMIVLA LVVMKVLNLI FGALWRFTMT LRQGLYAGRE KISRDDAKRA RAEKKLTQKQ
AKEAKKQKRL DAIYSAQQAQ ETLAQQAQSE PEESDDKNRH DALNDAVAAA RN

> aaRXA01547 (1-663, translated) 221 residues

MFDQVKRFFV RNIVMIIALI LAVVVIIVAT STSADRHAVL KRQTGEIMAL QQERDALNSK
LEGQLEQVVR DATGGMDIEH KAADDVVRE FLSMALTWDS VRDYLDVREQ VMRVYDLDEE
SQFMSVFMGP EMAGIARTDP TGEVHYAYDA DLSNRFSSLE SVVTRINGTE YSYVSTVTMK
SKRSGGEAET TTSRLAYDV IDGKIRNLEA RTVPGGVKYS G

> aaRXA01548 (1-1008, translated) 336 residues

MAENNGGSDD LKPISVDGVV NGEVRSDEKQ QAFEKITGDD LRRRAEQIRK RRLAKAQEDA
RKRKPLFGLG RIAVTVLAGA VFIGTTLWIS TTSGGFDDKV SANNEQIVTL RNEVNDLKNT
AETMPKKEKL ASQFDAATSR AQNVADLQNG LAGIITSVDD DAATEQFKTI VDELKPKFTV
SAGTTGEFPA AGRWYQPQEV VVGDNRRPTW APMGAESWG WTVPTLSMSD TEHVVMWWEA
RLTGGERYGA LLAWVTADYN INTGVFSSLA LAHTYEGHQR IGATTSPSEF GAHGTNAEAS
AARAGSEGGG LEGEAIFVDE LQRALEIAQL NKQENR

> aaRXA01549 (1-861, translated) 287 residues

MVDNKNSSSN SPTAASEYFL REWERPADVA GNAPIRAEQA SKWYQMGGW QKNSTLGESV
IAMADGAAAK STARDEQDAL NDCPEEDRTS GGNTSAAEAM VTISHPYLAD SRGNDGTDIY
RYIHDEVLTG DPYASCDRG VATAIRWSGT DDTFPAGPTA AQYEVVVG TG SGRWEEIGNL
ATMSENLLP GDVLLGAPNH VAMYVSNEVV VDMLGPGNAE PNAAIGHASL NDRSPGLDTL
SLDGWGVNFK VFRNTQAETN SVFSGVQIPA GKEIGEMTNP TRTPAG

> aaRXA01552 (1-978, translated) 326 residues

MYLGMEKESL APPQNRFESE KTVFSLKQKN IPIKDAKSD QVNLTWHDYP GEWFEGGAVT
DSEKQDKVET FRNLLGSDVA LFLVDGQKLH DYANEEERYL SYLFDGFIEN LNQIKDAILE
GGKQLQFPR IWVIALSKAD LWPDLQVKDF ENLLNKKAGN EIIALRSKLL EFIDNDEAFS
FGKDFLLLS AKFTPGHIDI SQRKGV DVLL PLACVLPQMR HLWWQELKVL PINLADILLG
NEIAQMGFKI VSKVLKNKVS GTNNKAMAAL VFAELVRDMV DQPTELLQKA REEAVGRREF
LKAITAEFTR KLNQAEADQV LVRDFA

> aaRXA01554 (1-2142, translated) 714 residues

LKKHVTSAVT AVVTAFSTAA LGLSIAVSPA VAQVANPAPD LSAPYTWVEE FDSADALKGW
NIFRQPDYGS DKVLYTEDAL SIEDGKLIT TQRHCVDEDF AISDPVNRGK LNDSTAQVEP
CAPGQFEKFT SARIVTPKIA RGEFDLSVTA TLNTGGVEGV RSAIWMQNGE QACSSATNNG
LYGELDLVEH FSYDLRSPWS PSNTHLGCDP ESVNGTNRAP RELKLDES LD GVEHTWTVST
TRDGVEYFID DEAINRQSWR NDVTLGHA EI DDFGISAQTF DEIVDREWL TLNQKVESAD
WAKPRSSEED FPVRSMVIDR IEVTGSPAVS EDTPMPDTTQ LLTQDTLEYL GRMPVLERYE
PASADFADGR RPSWNYFNK ESWQNPELEQ RPEAVEFVDG RMDIVTRRH C LATTTDDIATP
ENAEQEEPCAP GEVTRYSSAR VHLPEIPAGN FRLTVRARAQ SEELVDGVRP AIWMQNNTNF
CADNDGRPYG ELDITEFYSS RVNTQYS AVH LGCAGNRPEM KLRQMEMEES MFGDWDHGWG
EVFDGQIVFT IDGKAVTSSG KDVFGNSVTP AAAPLRPAHF KLSEEEYREV IGQPWHLILN

TMVEQSGKDS WITAVDNNEA FPEHRFQIDH VAVDIESDSV DNVWPDAAE IPDNVGIEDS
DDGSDLEVGS TGSSTAETVS WISLFTALSS LVFTLALNQE ALQNLINQFM RQFK

> aaRXA01557 (1-816, translated) 272 residues

VRSSNPVFSS LKETQRPQGQ NPYGGYDNFG GVIYQNVAPQ KAERPMTVDD VITKTGITLA
VIIIVFALVTF GVWLVSPLGL MILTLVGAIG GFITVLVSTF GKKGSAAVT LIYAVFEGLF
VGGISLLLSG FTVGNANAGG LIGQAVLGTI GVFIGMLFVY KTGAIKVTPK FNRILTGMV
GVLVLVLGNV VWALFTGGAS PLRDGGIIAI IFSLFCIGLA AFSFLSDFDA ADRLVREGAP
SKMAWGVALG LAVTLVWLYT EILRLLSYFQ NR

> aaRXA01560 (1-330, translated) 110 residues

VGVSIIAGD EQLDMAEAVR KIGETFKTEE IILGGGGTLN WSMLRDGLCD EVSIVMMPIA
DGEKHTSLF EADEKYSAPL PIGFSLASVE PLEDGSVWVR YGVNGPVDAN

> aaRXA01574 (1-1035, translated) 345 residues

MSNKRIGVVI VSYGHEQDVA NLVDTFADQL KTGDRVVVD NRKPWVLKDA VGERLEKHGA
EIINHONGGF AAGCNVGAH IVDDVDLLFF LNPDTVIDDP TLFNSLRVD EQWAAFPYL
LLPDSTINSA GNALHISGLS WVTGLDEKPV EGSSEVTDIS IASGACLA VRDWWKRLGGM
EELYFMYHED TDFSARLLLA GGRIGLLHSA YVTHHYDYAK GDYKWIYIER NRHVLLLSVL
PLPLLFVLIP QILGVNLGLW AIAAKEKRVG LKVKSLRLLI RDLPAIFKLR RSTQELAEIT
PSQYLAKMEW RLDNPNLGNL GSNKIVATGY KTYKLCMSI LKLLA

> aaRXA01575 (1-1020, translated) 340 residues

MKSIDLEQLA GTQSRITYQSR KITDEMVARP VHVAIALWEV PWESAKSGKI EGWVIAVDSP
RGRFVRSQGT KNGDAVNRTV SMLKSALKGV RGKAWIVTGR RQALRAALV RENYLVTSF
AEQNRAGVKA SAISRRAEQS ALYKAKKIGE FAERAPRVKE RQEAHWWPRL SRTQGTAGVL
RLATDASTDG VFRGAMCFVA SNGDYLLTQ DTTASSDELE LESITHALIY LKTIGATQAI
IESDSKAALE AIDFILNNRP RRGWRGITA CARNRFRDAW EALIDDCVVE LSRVLGHAGD
PLNQAADQIA YMGMRVIFE QKSAHPTLLK GIDKALRKA

> aaRXA01577 (1-375, translated) 125 residues

MTQTTTQIII QILLLLATAA LALYFLNRNR KARAKAWVKI GFVVFIFAAV WAVLRPDDL
QLANFVGVD GTDLMLYALV VAFMFTTSS YVRFREQLR YSKLARAVAL QNVVLPEDSQ
GSDPA

> aaRXA01579 (1-384, translated) 128 residues

LTEVFNTDQR VLNALFNVE EDDSGDDE QHNHQNPRG TEFAGLVESH EQRSNGHRQW
QHTKPVHLRG FFGGFLHAE RQCEGSDSAE SSHDPEDGTE TKCFSPATS KRVHAADTTV
DRGNNSEK

> aaRXA01585 (1-627, translated) 209 residues

VVETLSITSG AAGLQALVAR AVGLNELASA RFRQLTPEVV DVFVTTFFNV TASRRVFGVA
GRDGAAGVAK DLLQALSEGR EDVGTSRDAS WPGSLPPATG FTLVDELPH VVRTLADQGG
ALARQFSGPL GPPASLMDQE VISAEENGKK AGIPMRVFT CTSGLIPGF EAANDVPRHL
RVSNGRWTR VDAPYGSVYH SSGGLSVF

> aaRXA01586 (1-369, translated) 123 residues

NNAAFIEIAQ EARLAFEDQ FRERGYEIPA VFVRHLEVDY LRAILPDTTQ AVVETQVTKI
GNTSFSTRQE VKDRNGRVCC VVECVQAVN VQTAAPRSIS KVERKVLTA ATDEVQSQA
LEK

> aaRXA01587 (1-1983, translated) 661 residues

MTDFFGLIYN WSVTVGWLIG IPVSIGLFMM GALMFRMDK GSAFKKVIR VVYGVVGLPL
LGVSYTGALD SFLDSGSSTS AGSNATKIVL STYVDFQSWA ENTRMRVPDK VTLAWSLEDQ
APTQGSRMV RNSALEINAQ SNESFTTFKN PGSMDLGYM DWMEKMADPA NSGTDGTSS
SATTIFQGTI ALLSRYIDND SISSGSFETS IRSAMESLTS KEGSGEAVAG GDVMAVVTGY
NTASGLNEIT AAELADANNP LLEVSDSAGL QGRPIDRNAV SFKSGDATAS CNNSVVTGSR
AVVG DYRSDC NMSPLTMYNF LNTSFHPADA SVFSTSTSAS SYTRASHSAV SLIGSGAMNF
VYWFSAISLM GSFIVIGIGY AGAMLFNTIR RTLSLIGAVP FAAMGFIAGV AKVIVYTIAM
LVEVIGTIIL YQLITRFLMA VPALFEQPLA DSLSSNESAE LVAGAGMGLV GMALATSGNW
AIAGMVIIVA SSMGVIIFTI IAMKVRGSLV SGVDETIVTSV INRFLDTQVS SAGATSGDGM

MRRAAATGLG IGATHMVLNR DGDGGGSDSG SGGSGGSDS GLGEKAAGLA KVVTTVAGAG
 LVGKYATDAL DNYADGVING DGDGAFAAGG DATVDGDYVA DGDAIASADA NADFVDGVAD
 G

> aaRXA01590 (1-1284, translated) 428 residues

GKLKEYATYI GADPAQGFKD VGQPTPEALR SHYEGSQKAT AIKVLFTGVA GKKEQEMVAL
 CRNLGLTKEA MAASAPAQQS ILQAKHDPID ALYRAETLMG PVGDLYQGRK MRRGENEQGR
 YEWEVVRDEN HQPIQATKDE WVQQYMEMYA DDKGMGVS VGVDQVEKIAEE FSDEQGYMRV
 LSHDELPTTEI KPLALDQLAY GDKKNRFDLL CEMAKQQVNI YDGDAYDFAP RVVRANMKAM
 EDAARFGIPD VEIQSISAQQ SLASFERVPO RSGFRIERRV PAEVGTGIAA PAPLPDAGVQ
 GNYVQQQVPA TPPVMPVTPP AQQPVSPAQT DFRGVGQPLD QGGKIGNYGH QGPAMGAQQP
 VVPQQQNIPP VHNVPVQNSV PPTPVVPKPG TGNPFTHGGA NNQFMGRFDT SRYNQQEPPQ
 RQDGGFEL

> aaRXA01592 (1-1293, translated) 431 residues

NFDRSRDNR SSARTPRGDR GDRGGYRNSR GNDDRGNYRQ NRDGESRDRG GYLGDRRDNR
 SGEYRQRDDR RDDRRDNRSD DRRGGYRSDR NFDDRNSNMR DRRGGDRSY SRNDRSDRGY
 RSNDRYDRND RRDDNRDTRG GDRGDRRYDR RDDRRDNRD DRRGGQGR PGDRRHANR
 AGAGRDQQRD SLHPQRAGFR EERLNTRLNE PDLPGDIDIK DLDPLVLQDL KVLKDNADA
 VAKHMIMAAAT WLADDPQLAL RHARAADRA GRVSVVRETN GIAAYHAGEW KEALSELRAA
 RRMSGGPGLI AVMADCGRL GRPEKAIELA REEDLSSLDQ DNLIELAIVV AGARHDLGQH
 DSAIVELQKV NPSLKSTGFT HSRLSYAYAD ALVLAGRGDE AREWFQHAAT LDEDGYLDAE
 ERIEQLDNGN N

> aaRXA01595 (1-960, translated) 320 residues

MTAPTNAAGEL RRVLLVPHTG RSSNIESAIL AAKLLDDAGI DVRVLINDAD DPPIAEHSLVG
 RFTHVRHAAD AADGAELVLV LGGDGTFLRA ADMAHAVDLP VLGINLGHVG FLAEWESDSL
 EEALKRVIDR DYRIEDRMTL TVVVLGGGGE EIGRGWALNE VSIENLNRRG VLDATLEVDA
 RVPASFGCDG VLISTPTGST AYAFSAGGPV LWPELDAILV VPNNAHALFT KPLVSPKST
 VAVESNSDTS AAMAVMDGFR PIPMPGSRV EVTRGERPVR WVRLDSSPFT DRLVSKLRLP
 VTGWRGPQKQ AENKDPRSAG

> aaRXA01597 (1-1182, translated) 394 residues

MSLFNRKADL PGLQGATRIC TPQKGKLRK SEGDLAIIA PDLSTFAQR LLAAPAAVL
 NVSRFTTGSV PNFGPQMLID GGIQLVEGFG QELLDGTDKG KKGRLTEDGQ LFYGERLISN
 GSVLSGPAAE NAFADAQQL LDRMEAYFGN TIQFIHSEAP LLIDGLGIPD TGNAIEGRKV
 LIASPGDNHR SRLKELRSFI REYDPVLIGV DGAADTLVEL GYKPALIVGN PTGIGADALR
 SGANVILPAD PDGHAVGLER IQDLGIGAMT FPSSVNSSTD LALLLADFHN PQMIVNVGGP
 VTLDGVFENR ESDPAALLT RAKLGTCLVD GSVIASLYTV RSSNLGWMW ALLAILVLA
 VVIVIAGTAG SGSFTDNLID TWNSFALTQ GWFK

> aaRXA01598 (1-963, translated) 321 residues

MAKRRGRGAA TFAALGFAG AGIAFGTYVL APNLPENIDP NAPTSAEV AETLAEVNAV
 QADQADSIID HIVEDVAGT LTDRPVLV MR TADAEESDVA DVSWLLQAG AINAGSITLE
 ENFFSQDGAD QLKSIANTL PAGAQLSETQ LDPGTHAGEA LGAAALLNPE TGEPLASTAE
 RGLLLNVLRD NGYISYEDGT ILPGQVIVMI TGDSGSGDG AFAAETQSLF ARALDAQSGG
 VVAGRIHTA ADTGVIKRLR ANPDAAENV TIDSVNRTWG KMATVLSVRE ELAGRSGAFG
 SAASADAASP SLDGTAAAPA Q

> aaRXA01600 (1-669, translated) 223 residues

MVSKMHIPGT HEFTVTDTEL LLESPILGVR RDSLIMPGGS TARREVVEHF GAVAVVAFDG
 ENIAMVKQYR RSVGDSLWEL PAGLLDIAD DELTGAQREL MEEAGLEASE WSVLTDLITS
 PGFCDEAVRV FLARGLTKE RPKVMGDEEA DMINQWVPLH EAVGMVFSQ LVNSIAIAGV
 MAADAVIAGR ASARAVTAPF TYRPTALAQR RKAHGIVPDM KKL

> aaRXA01602 (1-1530, translated) 510 residues

MAKTHIRLQD LSLSYTSTPL ITKLNITVSS GQCAVIVGEN GRGKTLLRA LAREFPSPAG
 EILTHGTVAI AHQHMPAGDL SVGEICDEAI RDSKNALEEL ERAGALLETN TAHALDGYQQ
 ALDAAEVLDA WNAEHRLEKA LRSFGAITDR SRALSELSIG QRYRVRLACL IGGDADILL
 DEPTNHLDRG ALNYLTEAIT SHKGVVLVVS HDQALIKDVA DFIIDIDSTP DGLPRIYHEG
 FDSYRRQRSA LLETWRQDYA AAQTVQQQLQ EDLEHARQV NSSWKPPKGT GKHTRASRAP

GVVQALKRAQ DALDSKALDV PPAPAPLLLP TLKVRPDKPM VDFSDLFVPH RLRLPGSHSV
VSGDKIVITG DNGAGKSTLI EVLSGVLTPA SGSVANHART GVLGQESLVG EVPSIARDHA
VKWGLLSVEE SRFALQEFISI GQRRRLDLAM SLAGNPELLL LDEPSNHLSM HLVSALEWL
DTTAAVIMV THDRQLLRDT AHWRIELKS

> aaRXA01605 (1-1515, translated) 505 residues

VTSDSPAPAT VNAVFNNSNG FIASMLGNQV VNTVVETMDT EFGVRIVDNM LVGFSTLGDG
MNQAAEGATT LSDGVGSAND GAVQLADGAV TLRDGIASAN EGAQSLADGA SQLDTGLGSA
ATGSQTLADG LSSLSAGTAQ LGQGATQVSD GVGQLVDQVA PLTAYVPDIN SQLITLRDGA
ATIASELSDP SSTYRSGVDS AVSASQQLAA GLQTLKDGSS QLSIGARTLA DGTSQLAAGS
EQLVVGAAAL RDGTQVLDEG SSELALKLTD GASQVPTFAD GADTTIATPV ETEQAGDTP
LFGIGLAPFF MAVGLFMGAT VAWMILHPIS RRALDSRMGG FRGTLASYLP STVLGLGQAT
IMWAVLYFLL DLNPAHPAGL WMAMVAISWV FISITHMFNN VAGPSAGRVL SIVMMSFQLV
SSGGLYPPEP QPAFFHWFHT YDPITYAVNL VRQMIFNETP SNDPRFIQAI WVLLFIWALM
LAISTLANRT NKVLRMKDYH PELKV

> aaRXA01610 (1-729, translated) 243 residues

VSGFLTTPPAT PHIRTATASI ATAVAVALS SVFAALIPGSA LYSVLTAGGV ALGAASGVAA
LRHRGGLRIF QWLSALGGIV ILLIGIVVAV AKFGASAKLA TLGLVTSYYL MPSAALACYI
GGLGQLPAKW IAPAFMATAG AGAAGWFSLG AGTGFERFLI AVAAVFSLMG CVYPVWGCVV
KRPRQVAWL VALAALVLGA LMLFMVSMVV APGLLWLQPT TVAWGFMIAG VLATVAGLWP
RRF

> aaRXA01611 (1-357, translated) 119 residues

MRKFRNTAIA LVSAAITLG GVTAATAQED ETTPAAETET TSPSGSSGSS WNDYNEEYEG
DQEGYGIDGF GSSRDDSSEE VPRWLETWVK VFDALTITSV LGLVVPVNVN FLKYNGLIK

> aaRXA01612 (1-345, translated) 115 residues

MRSFRTAAVA GLTAVALSVG SATVATAEES DQNLSSGFSA LSSGGAAAVG EDWDADQPVT
GEDIFGEEHE RDNENTPAWA KNMYDLTVLG GIASLLGVIV FPAYNYLVYT GVIKG

> aaRXA01618 (1-384, translated) 128 residues

MIIIGAVFAI LAVLLHVFIF YMESFAWTSE KARGVFGTTE IDAENTKEMA YNQGFYNFFL
AVIAGVGVAFL FAGSTGIGA ALALAGTGSM LAAAVALALS SPDKRGAAFK QGTFFLLAVV
FLVIGLLV

> aaRXA01619 (1-975, translated) 325 residues

MRAITHNTFG DPADVQLITE KEIPTPGPGQ VRIQVTLATI HNHDLWTVKG SYGFVPDLPA
AAGTEAVGIV DALGEGVEGL QVGQRVASGT SFGIWAAYAL VDASGLIPVP EQLSDESAAQ
LVAMPFSAIS LLDFLDMKPG EWLIQNSANG AVGRMLAQLA ESRGIHVVLG VRRDAGVQEL
AAQNISGVVS TETPGWEKQV EDITGGASIA VALDSVGGSS AADLVKLLGE GGTLSVFGAM
GNPIMEIPSG PVIFKHITVK GFWSGKVSRE MPAEKKTQLF GELIARILDG TLTLPVDSTF
DAADIVSAVR ASSEPGRAGK VLIRF

> aaRXA01622 (1-603, translated) 201 residues

MSDFYADRLF NAMERNEVAP GMLLVAAPDM ASEDFERSIV LIIHSPATT FGVNISSRS
VAVANVLPEW VDLTSKPQAL YIGGPLSQQA VVGLGVTKPG VDIENSTSFN KLANRLVHVD
LRSAPEDVAD DLEGMREFFAG YAEWAPGQLN EEIEQGDWV TPALPSDIIA PGRVDIWDV
MRRQAMPLPL YSTFPSDPSD N

> aaRXA01623 (1-711, translated) 237 residues

MSENLEKEIR GGIGETLTVG LGLIPLGLAF GLLMVQTGFA WWWTPIFSIV IYAGSMEFLA
IGMVTAGIGP FSAAVAGFMV NFRHIFYGLT FPRHRIKSGA GRAYSTYALT DESYAIVSAR
PPGDISGTRV LTVQILCQAL WVIPGIIGAL VGQVLPDDLK GMDFALTALF VVLAWFAFKN
NKDYSPLFLA VVLALVSGFV APEQMLVIAL TTYFLILLR VRFPNLDKKL EIRTSHE

> aaRXA01624 (1-345, translated) 115 residues

MSEFGLPEGV TLLNVAAVLI PIAIITLLLR IFPFAAMKRV NSNQLMGVLG RTMPVGVMMV
LVIYTLFGQV SAPGGVGASL IAVAFTALLH WLKGSAGLSI VGGTAYMFL VNVVF

> aaRXA01627 (1-495, translated) 165 residues

RTYSPSLKDY NSDEPSLLGP AEDPNMYQEF EVSYEQLGK PEGRTLIGDS FSADFLTSNE
IGIVDEVPSPG TIAFTNWKDV TEGRHSWYVR SEDPFGGVEI SPVQSFIAGE EAGGNAPGTG
SSNGGSSHGL WGALAEFFAG AAALAGAAIA FVPGIWDYVT NAFKR

> aaRXA01628 (1-1014, translated) 338 residues

LVLVGCSNTA ESTTTDTAGS TETSSQISPT TPVSTTEAAP PEDPSANALE EYAQILANPS
IYPLTEISQF VPTGTIAYTL VEATSDSIPE LLLRADSHF APILVFTYDE NTQSATQAGG
VLIDGVASAG GSRVKVRASN SGAGIYQLNW YSIQPVGESS LYGIQGNLSL QIADPEDFMV
RELLPDHHEI TWVDSNDPSG LSTVQTGGAN IQQAAPTPVQ QPASNLHYFS GVVMTQTAGE
LMRGERTPNG EPATDLYLVL VLDSPIEITA RNAATDPQTR TISEVSLGRY IPADGDNDWI
GYLDTHVEIT ATTDQVWFPT DTGLPLGMLR LADYKSIS

> aaRXA01630 (1-1077, translated) 359 residues

MSDQKIVVGL LGITHPHASA RVRALREIDG VEVVAAADTD SRLQYFTDKY DVEPREIDDV
LNDDRINAIM VHSKSKDMVP HAKRALAAGK SVVVEKPGGG TVADLEELLA LKEAADPQRI
VQVGYNVRLS ESQRLKELL DAGLIGEVVS VQARGAAKVG EHTEHLNQP ADMGGVLWIL
GCHMLDALVE VFGAPESVNA RVHKTAKLSD DTSREDSASA LLYPDFSVS FSDGHDDLE
WFESSRLTVY GTKGMIEAGI LPQTLRVYLN ESRQGWPGW TEWTQSYFTP PFARTESNKF
SELPELENIS NFRTEMQGW NSIRTGSRNV APVEDALTVA RIVSACYESD NNQGISVNI

> aaRXA01634 (1-552, translated) 184 residues

MAVGQETDLL NAMETLAGVP SDLVVTEILP DTTSYDNFEF FEVHNTGSAP VTIGEGETTF
AYSFDDSDT SRDKALDLGG EVTVDAGETI VVWIEYSSST VDTAAFSEQD FRDFYGMDS
ARIFRATGQA GLANGGDRGI RVLNGEVSG WSHYPSDSAA VQKGIDFALP KVGEQASIAS
AHQN

> aaRXA01635 (1-741, translated) 247 residues

LIPGGDLTPE EPEAPEDSLF EGRTPPRDAS TRLILTELMV NSTNMGSSDG FEYVEITNTT
AEPIDFSDYT LNYLYPQDEF TNTNEAVWAA EPGDVIIQPG KSLVFWIKNG PNDEATAADF
NAEYGTNLEA GKDLVEISSG GMANGTARGM QIQTNTGHIV NRGFYNMAGA SDVKANEGLH
FAVDESLLK QTLVGSGAPT PGTVYTSQIP NPLSAVIADS SVPLITDNTA TSINPAEPFT
FAFKYHR

> aaRXA01636 (1-573, translated) 191 residues

VRTATLHVTS SAGEAATTIN LTEDDGSFNW ALPAADLTGK SWFEYTVTAT DGFNSVTTEP
VRVTVDGANT DPLRLNLEEN QWVSGTTDVI GASDVFGDKL ELLIDDAPAV TNSSLSAAPT
FAMEVTQTDV FFRNGILAGG EELRIFDQGT YANTETISTP VPLYHINEDG TLTVSUYAGT
KAAPEIDLNE N

> aaRXA01638 (1-390, translated) 130 residues

VLVTEDLLIE APFGFEMRSD EQSRYLEGPD PNLRIHVGVD PLHGADAALV AEELRRRLITE
DPSLEEIPAG EWGEKTTIDY RETPGDGS HV LWVTWFDTR QLVNGCHSKA AETLVHKAQC
RNVIEHLTLK

> aaRXA01639 (1-438, translated) 146 residues

MSTQTITITV LETATIFDGP ETIYRYDLAA EGILDGWAHS AVLDQVKQIA GENWPTVEIV
VDGTDNVVNA LTSMFASKGV TCGGVGVEAP PVAEPPKIK RPTSGKQVRQ FYGIKPLHLL
LVSILVGSIA GIWGRVSLG QWTHGR

> aaRXA01641 (1-1371, translated) 457 residues

LAIDNALRVS IRIDLTVGDA PAAVADVALP AGSSLADILD EILELTDAPR ISRPVVAHTA
AGSPIDCGIP LAETQVEQGS VVLSPERDL EAPVLRDVAE ALVEFSSTNR AGHLVEIMTF
AGLIGAAVLM TSPAASGIIV PGRMGIFVAI CALLLLWLPP AHTPILRNVL PITLILGAGG
AVSVLVAGTS GTSPGALTWT IFAGACTILA SSSLVHVYR PAILLVATLS TLGLGLLVLA
ATTTLWKLKA TEDFGPAAI TVTASTITMC FAPKIAASLA GLRVPSLPTA GEDLSVSDLT
MTDPEKRIKT TKTLFDAQIL GLGVLSGPLA LLSVTPGTWT TTVFSLCIAV ASLLHANRHQ
APIPTWTLMG LSALGFISMA LSASRSGSLI ALIGSVVIA VLVSVLWIS TVPTLEPTTI
VWLERLESIC LAASLPLALH LLDVFGMLRG LDIGFGG

> aaRXA01642 (1-1242, translated) 414 residues

MRRLIAVSLA ALFMLASTPA TRAQEVEALA CPEVAIADPS SAVLDEHLSQ SLSQAHQLAT

GAGVMVAVID TGVSLHPRLP HLIPGGDFVG AHQSPDVPGE LIDCDGHGTI VAGIIASQGN
 PGTGWVPYDGS SDPYIGVAPD SGIISIKQTS SYVRTREDSN VGTLSLAES IHRALDSGAH
 VINISVVSCL PQSPDEAASF QPLTDALNRA ELQGVIVVAA AGNLGQDCPV GSTVYPAHSD
 TVLSVSARFD SHTLAEYSMP GNQQILSAPS HIQAGLSPRG DGFASHMITT AGESPFEGTS
 FAAPVVSATA ALLRQHFPFA TPYEIRARIF NSIDPARGAI DPYLALTQEI YPTTPLVHEI
 ALSVPTPPDD SPRERGILVT AIIVGLLAVL AVLMGLRRIH HHSAFQKASS SVIT

> aaRXA01643 (1-426, translated) 142 residues

MGMTREMVS D RIDRLQEAHA RSKQKKFGFL VRPGTLILGW LVTIIGLITI PLPGQGWLTT
 FIGVGILSLE LKWAKNLLAW GVHQYDRFFT WYGKKSFRFR MAMLALMILL IWVVFIWTFW
 LMWHAGTIPW ADEFFTWLGL SR

> aaRXA01645 (1-606, translated) 202 residues

VVRKLWPRDL LRSSFYWKII GWDKYSIAD RLEERKGRPA RERVVQDVEV TIDKLPEFLK
 WFFESSDIEP LWLCPIKLRE VPGSSVGAGE ILSSAEIDS GAAEHPWPLY PLKKDVLWVN
 IGFWSSVPVD LMGSDAPEGA FNREIERVMA ELGGHKSLSY EAFYTREDFE KLYGGTIPAL
 LKKQWDPHSR FPGLYEKTVK GA

> aaRXA01646 (1-819, translated) 273 residues

MSGLVDPDST FLKTIGKLSN SLSIGRGVDQ KEVIPKGWNA HWEAITKLKR SFDAIPAGER
 VRLAKKTSNL FRGRSDAGHG LDVAALGGVI AIDPVNATAD VQGMCTYEDL VDATLSYGLM
 PLVVPQLKTI TLGGAVTGMG VESTSFRNGL PHESVLEMDI FTGTGEIVTC SPTENVDLR
 GFFNSYGSGL YAVRLKIELE PVQDYVQLRH VRFNDLESLE KAIEEVASSL EFDNQPVVDYL
 DGVVFSPTFA YLVLGTQTSQ PGPTS DYTRD LSY

> aaRXA01647 (1-888, translated) 296 residues

MPRGVPVGV P DAPGLFSSTE EPEQDWFVCQ DVGTDGLHIT VPRGGLGPTL IAEGNGWLGA
 SKSETGEVTV NLITADGRRE LPAWGSEHGR IMRRHLGISE DTPRVYLTTE LLNAIPEHDA
 VRFPAPLPEL VDASTRNWL R LDGALAEITP LQRGLLIDAG SGVFPDPTAL LGVHEETANT
 LTLPEQTVSW QDL DGGFACA DGEGQIGFLE TLES GVALSG DSRKSFSTN AGGAVGVDSG
 FGYVVSDFG LMHPVSTGES MVALGITDVQ VVPWSVLRL L PQGSELAKET ALAPTY

> aaRXA01656 (1-897, translated) 299 residues

MTETQETYQA TTRVKRGLAD MLKGGVIMDV VTPEQARIAE DAGASVMAL ERVPADIRSQ
 GGVARMSDPD LIEGIVNAVS IPVMAKARIG HFVEAQVLEA LGVDFIDESE VLSPADYTHH
 INKWKFDVPF VCGATNLGEA LRRITEGAAM IRSKGEAGTG DVSEAVRHLR TIRGDINRLR
 SLDEDEL FVA AKEFQAPYDL VREVASTGKL PVVTFVAGGV ATPADAALVR QMGAEGVFVG
 SGIFKSGNPA ARAAAIVKAA TLFDDPSVIA DVSRGLGEAM VGINVSDVPA PHRLAERGW

> aaRXA01658 (1-1485, translated) 495 residues

DPQILSPTFT QQQQLRNFGY FPDQLAMDRF EVDGKLRDFV VAARELDPNA LQONQQDWIN
 RHTVYTHGNG FIAAQANQVD EVARDVGSTR GGYPVYTVSD LQSNARAAES EDAAELGIKV
 DEPRVYGP L IASATDGADY AIVGDTGDGP VEYD TDTSSY TYEGAGGVDI GNMVN RAMFA
 LRYQEMNMLL SDRVGSESKI LFERDPRSRV EKVAPWLTTD SKTYPTVIDG RIKWIVDGYT
 TLDLSPYSTR TSLTEATQDA VMPDGTQPPL ITDRVGYIRN SVKAVVDAYD GTVELYEFDT
 EDPVLKAWRG VFPD TVK DGS EISDELRAHL RYPEDLFKVQ RDMLAKYNVD DSGTFFTND A
 FWSVPGDPTA AEGRQELKQP PYYVVAADPE TGESSFQLIT PFRGLQREYL SAHMSASSDP
 VTYGEITVRV LPTDSVTQGP KQAQDAMMSS DQVAQDQTLW RGSNDLHNGN LLTLPVGGGE
 ILYVEPIYSQ RKDQA

> aaRXA01659 (1-486, translated) 162 residues

PEAVTAVWME SDWVLAETIK GSTPSDWEEI LRPLALLTDA SFTLPPRSTR AQTLDLKHLH
 PSRLKPEQPE KPAFTPNASE EDLSQPLVIR PEEPLQMPVR GVQESRGVVE PRSLGADDVE
 SIAEGDPERP SDLYGTRVLR DLNGQSSIFQ DSTDADEPPK KW

> aaRXA01663 (1-435, translated) 145 residues

MEISVLIIAA LILVAGIVLW RADSSKQAAK KAESPVGSA PAPVLVEEEP DPEFEPELDP
 EPEAQPEPEL EVAPRFAPEP VQDLEPDQAE DIYFDDSPEL DADVENALAE LTEVEDYPEE
 PVQSEQPQAP ATA EVAADDEE QRGVD

> aaRXA01665 (1-720, translated) 240 residues

VKIDELIALA AEQPTRISRR SGVSRSTLKR VGDGTSEPTL STLREVALAL GLDIKVAHH
ACDPFAAAAA RTLIDASVPE NPHNQEILAW LHRFERWNIN DPLTLVSEAG TLQGITHRQD
AQFVKLNPRG IAELPELFQQ HKTKWALSGA AAATVIMQOI VLGNISIVWHE PAHDLDSVSA
GTIVDVAEDA DLILLPATVT ELVGSYTQDR LNFVAPVQLV IDLHSLHMF EADYLTSGWR

> aaRXA01669 (1-732, translated) 244 residues

HNLSDALTAI PLWIAFILSR RAATQKYTYG FNRAEDLAGL FIVAMIALSA IVAAWQAIDR
MINPRPMENI EWVIAAGVIG FLGNEAVAMY RIRVGKRIGS AALVADGVHA RTDGFTSLAV
VAGGVGVFLG FPLADPIIGL IISAMIATLL VGTIRSVGRR LMDGIEPELV EKATHAIWHV
KEIESIDRLR LRWVGHRHLG DATVSTSTSS LSEATAIALE AELSVKQHLP NVDEMTVTIT
PSKP

> aaRXA01671 (1-615, translated) 205 residues

MNHVNFASH LEDAALKQAE ATATMPFIYP HVALMPDAHF GLGSSVGTVF GTKGAIIPAA
VGVDIGCGMI GVCTNYTASD LEGRDLVTLR DYIERVIPLS PGYNSTTLK ETAKVKVAEL
EELAERDGV D LSHSPTWKRQ LGS LGGNHF IELCLDELDR VWMFLHSGSR GVGKNIAHKH
IKNAQAQCKN EELPKDLAY LDRGD

> aaRXA01672 (1-309, translated) 103 residues

SPLATFRVAL AMSIIGLVAV IICVTVLYFG LNVAGVWQNF NDVIGGVGAE QTITFGLVLS
ISALLGAIGA ITVAVLAPLC AIIYNSIVDL FGGLQIQLEQ EVD

> aaRXA01673 (1-1035, translated) 345 residues

MSTNLESTP PFTQLRTGVL QKYTPGLLLC SIAVLIAMIV NHFFSGVSPL IVAIILGIIL
TNLIQLPAST SPGITLASKK LLRLGIVFLG LQLVFSIDLS LGFPMALVIV CIVAGGIFGT
ILMGHLLRMK PTQVLLIACG FSICGAAVA GVEGVTDSEE EEVTVAVLV VIFGTLMIPI
IPFATKVLGL SPEIGGMWAG GSIHEIAQV AAGGVIGGGA LGVAVVVKLA RVLLAPIAA
ILSFRQRQY YTS PDGKRPP VVPLFILGFL AMVVLSTVA LPDEVIAAGG FLQTALLSAA
MFGLGCGVKI QNLHVGVKP FILAFGSTTL VTSIALAGTL LTHLG

> aaRXA01675 (1-411, translated) 137 residues

MNEIPEWTL VSVEAGKRLG RPGPLVFPPE LVTLAVEGIE LIELEPSWTS DLPLPEFGFL
AADMVDFYDD YEFSEWIPGA WPLALDGGGG FFCLDLRAAN ADGEIPVVWV HASNLGWGDD
EAVRVAASLA DLLSPSK

> aaRXA01676 (1-756, translated) 252 residues

MILHGVVIFY GLLVLLVPLG LGAGILGELF ITQRQTIIIV SSIVLIILGF VQIFGGGFDF
GKALPGLDRL QSKATVTSGL GKSFLLGMTS SIAGFCSGPI LGAVLTLAAT SGNSITSALI
LSAYGAGMVL PLMAIAALWA KLGQRGQOML RGREFTFLGR QWHIVSVISG ALIIAVGILF
WSTNGLVSMP ELVPMDTQIW LQEATFSLGS PLFDIALIIV AAGFLYFWN KRQKRKEEAQ
RPKESGWVIN PR

> aaRXA01677 (1-744, translated) 248 residues

VNQSKKWL PTLVVIIAVL LIAVVLLMYR GNASDTAEGV SAAATSDSAA ASTAASGSAS
GAADSDLT SV EARDPSDPVA VGDVDAPVGL VVFSYQCPF CAKWSDETLP QMMKHVEDGN
LRIEVRVNI FGEPSEGRAR AAYAAGLQDA YLEYHNALFA NGEKPSDDL SEEGLIKLAG
DLGLDESKFT ADFQSPETAV AIAQHQQGLI DLGAYSTPAF LLGGQPIMGA QPASVFEEAF
EQALAAKE

> aaRXA01681 (1-633, translated) 211 residues

VEVLLLIAIV VGGGVFVASK MGSNNKKQE EAKFADAQAD ARRWIERLGS QVLTIAGTDA
ASTQAIADAS ERYTAASSQI SSATTPRQAE LARESALEGL HYMNAREIM GMTAGPELPP
LEGQRNAGRV TEKRTIEQEG RQITASPVAT DETPNYYPGG NVAGRPVPAG WYSEPWWASA
LRSLWLTAGS VMMFSAMFNG MAGVGYSAAD L

> aaRXA01685 (1-579, translated) 193 residues

MSFAIGITVH AGLGTTTIS LPVWTAASG LSLGWTTIYF NGFMILCQII VLRSQFKPQM
LVQILWAFLE GFLCDLSLQL TTWAQTDNYF VAWIWIIVST ILSIGVFIQ VLPNITFIAG
EGIVSALVKK FPNVEFGTMK QIVDWTFSV AAILSWITMG GLIGVREGTV FAAFFIGFFV
RQWRKLYLRS IGH

> aaRXA01686 (1-441, translated) 147 residues
 MTSRLRDLVS TNADAAIADM SAFIEETVGK QSGISGIALK GAMGAATKID SDIVAKGSRR
 LLPEIADSLD GLWQEYQNGG TAADFGAHLE ANSSTALDAI LSVADKNAES INVPGLGKVY
 KGVRGKAAKV IEQELPAIGQ LIEKNAQ

> aaRXA01693 (1-1422, translated) 474 residues
 MNTAPFKLEA DFASALPTMA APWQGEEAPN PELVILNDDL AYSLGLDPTW LRTPEGVQFL
 LGLNPEPLTK AVAQAYSQH FGQFVASLGD GRALLLGEAR SADGVLHDIH LKSGSRTQES
 RGADGRAVLG PVLREYIIE AMHALGVPTT RSLAVISTGR KIQRGSVAPG AVLVRVATSL
 IRVGSFQYSN ISGGIELSQH LANYTITRHF PSLVAELSAP TPATYVSLFK AILQRQADTV
 GKWTRLGFVH GALNTDNTLI SGETVDYGPC AFMERYRGDA KFSSIDTYGR YKFENQPMIL
 GWNMARLVET LLPLLGATPD EGMTAAQEAL VEFDDLCEQA IRKEFATALG LDES DTGTVE
 QFRELLYLHN PDITTLRLAL TDNTAPPSGF EAFVHDWKTQ DPDIEMARAV NPLFIPRNLH
 VEAALADAVE GNLEKFHELL AAVTNPFDPF AGPDELRLPS EEGFEEDYMT FCGT

> aaRXA01694 (1-900, translated) 300 residues
 MQKITPNIWC QGTAEAAEF YVNAFSEFPG GAEVLTTVKY PEAGLLDFQE PFAGKTLTVE
 LAISGFKIIL INAGEEFTPN PSISFMVNF AVRDENAKEH LDAVWEKLHE GGSTLMPVDT
 YPFSEYGVW QDKYGVSWQL MLSRPEEKPG PAVIPTLLFG GAAQNQAGPA QENYVEVFPN
 SQLGDRAPYG QQTGPATPEA LMFSQFQLDG QWIFAMDSGV EQDFTFSEGV SLMYEAHQE
 ELDAIWNALS AVPEAEACGW LKDKFGVSWQ IVPDNMEELM AKPGAYEKL AMKKINIAEF

> aaRXA01696 (1-597, translated) 199 residues
 HSDPVLMEVA YRQLAEQSDY PLHLGVTEAG PKFMGTIKSS VAFGALLSQG IGDTIRVSL
 ADPVEEIKVG DQILQSLNLR PRKLEIVSCP SCGRAQVDVY SLAEVTEAL DGMEVPLRVA
 VMGCVVNGPG EARDADLGVA SGNGKQIFV KGEVIKTVE SQIVETLIEE AMRIAEMDP
 EVLAAASASG MKAEVKVT

> aaRXA01697 (1-726, translated) 242 residues
 MFQGLKELTA AKGRTLLITV TVGLIAVLVT FLSALTAGLG HQSVSALKYL AGDNELILAD
 SGSTTSLAST LSDQAVAQLE DEGAQMLWQV RDRVADTPM LLNSPDLAPG EVSLPAELAD
 SELATAHDVV DSSNDLYLDH LPVVMNTSD LASLAQVRGV TGPAGAFASD VALPSDTVAL
 SGERWNASA SYQGEQMSLN LMIVMLYVIS ALVLGAFFTV WTIQRLRGIA ISSALGAARR
 VL

> aaRXA01701 (1-333, translated) 111 residues
 MLSHEEIVAI AEDLLSKRYG GVQTLSDVEQ LNSGTS AVL RARVANSPFL QQRSVVLKYV
 PSTGDVFDSD ALVREIVSYQ FTTSLSEDVR PGPVILAYDI DKRILVISDS G

> aaRXA01703 (1-471, translated) 157 residues
 LKYFAHIHAV VQAVSRKMTN FHGVIDWDTG DGDGGLFKGI LVRYLADVAI RLPDDSPNTR
 ETKKIAARLV LESAESVWNH RLEVDGLPVF ATDWTTDARL PQNFGLSSSS LSDLVSVVRV
 DERDLSVQLS GWMLMEAAK VAEELNNGN SYTGRSR

> aaRXA01709 (1-330, translated) 110 residues
 MRSGVDMILN ETGGEKMLAQ ADLVITGEGR IDAQTLSGKA PTGIAKRARA KGIPVLAVCG
 QSLGPAISN ELFEDIYSFT DFESDINECI RNPLPILEGI GFNIAKHHLS

> aaRXA01711 (1-1158, translated) 386 residues
 MLLMAHRFFV LAINGAVTDD FTTVYSALRR FVEGIPVYNE VYHFVDPHYL YNPGATLLLA
 PLGYITHFTL ARWMFIAVNL LAIVLAFGLL TRLSGWALRS MVWPIAIALA MLTETVQNTL
 IFSNINGILL LMLAIFLWCV VHKKSWLGG VIGLAILIKP MFLPLLFLPL VKKQWGLLIL
 GILTPVIFNA VAWFLVPGAS EYVTRTMPYL GETRDFANSS LPGLAIYFGM PTWMEITWFL
 IFGAMVGLAV LALLRFRNTE PYFWAATTTG VLLTG VFFLS SLGQMYYSMM IFPMIFTLLG
 SRSVFHNWVA WVAAYFLLSP DTFTSQRLPD VARWMEFFSA TVGWGLLIVV TFVSALIWFI
 GDIRAKGTPS SPITTDPTH HLERTA

> aaRXA01714 (1-615, translated) 205 residues
 VIDSEATSQH KTSATPAEST PAEFSEAVES MHRARLRPEL TLGTIRPPQR LAPFSHAIGL
 EVGNQESDD VSTNSEGDSF GRLLLDHDPG AEETWEGAMR LVAYIQADMD HAVASDPLLP
 EVAWQWLNEG LEQAGAGFTN LGGTVTSTTS VRFGEIGGPP SAYQVEMRAS WTATGDTLTA

HVEAFAAVLA SVAGLPPEGV TELRR

> aaRXA01715 (1-696, translated) 232 residues
 VSELDIKQLN KLQRYSQWAV FRAIPGALDD DRTEVTDQAA KFFADLEAEG KVTVRGIYNA
 SGLRADADYM IWWHAEFEED IQKAFADFR TILGQVSEV FWIGNALHRP SEFNKAHLPS
 FIMGEEAKDW ITVYPFVRSY DWYIMEPLKR SRILREHGQA AVEFPDVRRAN TVPAFALGDY
 EWLAFEADE LHRIVDLMHK MRYTEARLHV REELPFISGQ RVDIADLIKV LP

> aaRXA01729 (1-519, translated) 173 residues
 VKLRTIPALL AVALLAGCSG ESADSQAVSA EETMEVTTTS TPVFEEAKEVS PITVPSGDIR
 VEDPGLNVEF IFRGTRYGTN GGSIIHIAVK NLNDVALPAD AIDPPTLDIE DYNGNKTNIE
 TLSGDDNIPL DLPLGAGATT NLQYAFNTSN GSLSNAKFQI GNVIYSGNLN SLA

> aaRXA01731 (1-699, translated) 233 residues
 MNASSISSRF KDLFVTPSIV FDFDGTLAG HGPVLAYALC VAPEGSKDFL ERVRRELRRY
 DDGQSIYRDG YDIVAKLASE LGIDDGTMSV AYGESRKLLG SDLAPVEHVR GIKDILSSLK
 GHARLVLATN APENGVDHLL RQWGVADLFD QLHFVVGKPA GLISIISDLQ LDGPVLAVGD
 IYEFDLSPAA QLGADTALVG ATATISEAKV SMRGDSIADL PLLAWVCSRV SSS

> aaRXA01734 (1-534, translated) 178 residues
 MTDPIEQAFE RIRAEAMRRN GSVPLDNKND AFRRPPAPKG GVEKRKKGRA SGLDGRQKRY
 VRGAESLGSV LNKEIQRRGW GKDIAGGWT SNWEELVGAK IAQHTRVEMI KDKKLFITCD
 STAWATNLRM MQRQILQVIA EKVGPNIITE LRIFGPQAPS WRKGPLHVKG RGRPRDYG

> aaRXA01738 (1-714, translated) 238 residues
 MRILPIGPHD EIAVNGSIVL LSEHDGDIVS VGPDLGTVRV TLEEIESLGT PTAPRDLGSR
 EVDACVSLR NRELVRFDPH DGSELYREH SVAYGASGKP LFPRLDPAVI GIVELRGEDR
 LLLGMNAQKR QRYSLIAGYV SHGESLEDAF TREVFEEAAR RVSEISYVSS QPWPISGSLM
 LGMKGFTED LPOGETDGEL AETIWASPLD IIDRKIPIAP PGSIAYDMIN AWARDKQN

> aaRXA01741 (1-798, translated) 266 residues
 MTHIALANSA QVLIRPDSAI QFGIDATRA VLNIDPSLSS RVVPVLRNLR TARPVIDVIA
 DLTTAGLAPT AASSLLEDLL EFGVVRESAA AQVLLFGDGS LVDVTSFLE TSGFVPRPQI
 IDESPREFFE LPSSHILVLN KLAHSQRLSP LLHKYAPTYL CAATVDNRGI IGPGRRSRSG
 PCLMCVDLHR CDIDPHWLSI INQQPNGPTF PDPVTEMATA ARLVAWVTAD TWLPGVVEEV
 NPHDRTNSVR TLPVHPKCPM CWSLGS

> aaRXA01742 (1-504, translated) 168 residues
 MQEKPEMPAI EVIRSAKRTK TVQARIVDGG IQVRIPARMS KAEEEKAVGE IVAKLKRRTQ
 SAVSSDADLI ERAHKLNKTV LEGRARVESI RWVSNQKGRW GSCTVATAEI RISDRLKHVP
 DYVLDAVLVH ELTHTFIAGH SAEFEWADK TPLAERAKGY LEAYQRWG

> aaRXA01748 (1-780, translated) 260 residues
 MADAKKQADK AAKQVRAAK KAQRKETRSQ MWQVFNMQRK QDKALIPLLL LAILGIPLVL
 FLIGLIWGGQ WWMLPIGIAA GVVAAMFIFT RRVERDVYKR AEGQQGAAGW AVENLRSGVG
 MTWRTKTAVA VTTQMDAVHR VIGLCGVVLV GEGSPHRLKP MLAQQKKRLN RVAPGVVPYE
 IITGNNEGQT PIAKLQRELK KLPRNYKKND VAALAARIEA MDNVGNAPGG SLPKGPLPKG
 ASMSGMNRRA RRAERKGEA

> aaRXA01749 (1-1617, translated) 539 residues
 VSFLVENQLL ALVVIMTVGL LLGRIKIFGF RLGVAVLFV GLALSTIEPD ISVPSLIYVV
 GLSLFVYTIG LEAGPGFFTS MKTTGLRNNA LTLGAIATT ALAWALITVL NIDAASGAGM
 LTGALTNTPA MAAVVDALPS LIDDTGQLHL IAELPVVAYS LAYPLGLVIV ILSIAIFSSV
 FKVDHNKEAE EAGVAVQELK GRRIRVTVD LPALENIPEL LNLHVIVSRV ERDGEQFIPL
 YGEHARIGDV LTVVGADDEL NRAEKAIGEL IDGDPYSNVE LDYRRIFVSN TAVVGTPLSK
 LQPLFKDMLI TRIRRGDTDL VASSDMLQL GDRVRVAPA EKLREATQLL GDSYKKLSDF
 NLLPLAAGLM IGVLVGMVEF PLPGGSSLKL GNAGGPLVVA LLLGMINRTG KFWWQIPYGA
 NLALRQLGIT LFLAAIGTSA GAGFRSAISD PQSLTIIGFG ALLTLFISIT VLFVGHKLKM
 IPFGETAGIL AGTQTHPAVL SYVSDASRNE LPAMGYTSVY PLAMIAKILA AQTLLFLLI

> aaRXA01750 (1-1641, translated) 547 residues

MCINDPKGEL LKKNYVRMSK RGFQVVQFNL INNLKTDIYN PLGLAAEAAR EGNMGMKCATY
 VENIAEVFFP VDGADDPVWP NAANNAFKRA AYGLIDFYLE EEREMRKQAA AENWDADVLD
 TRIDQMWGKV TLYNCYQLFV QLSAKKLKPN VERLNERARA GEFGNLETDE NAAMMFQDAV
 TEAEENEMFL WEGEKEKDML TLFFSATDGL PKSSVRTLVG NADKALKAMG GAEKMMASVY
 GIAITAMSFF TDPTISTLTS GTLSQNVDLA GLSFPRRMGV RFAAPYVKRY NLVGSQVQWD
 AYSDAKFTKP LGKNFVHDDT LSVEGWARFY IKDSFPSNTA YLRRLRLNGT SGTLIKTLTYF
 KFTKGYQTNL KGRAFITDPV TDEKIIKNGL LIELVKNDAG DFVPGHVQFK TKKLNLDQLT
 QEQUINMPGHD MIKQVDAMVD AVSALNVVRY EKPKAVFFVT PPHLMKYAKL ILILIKQLVD
 LNFDSSYMTR ENQKPDYKTR FMLDELGNLQ SEGHIAGFE TMLSIGLGQE QQFSATSCVA
 KNYALAA

> aaRXA01752 (1-552, translated) 184 residues

MMEQDLSYRE ILPLNASEEK KKAALIDAIE GLRVRDPLLS ASIAFTRGQK VAFIAVVVGF
 ILMILIFARQA ALIGLSATCT FMYLITLLDR FIMFSRGIRA ESIIQVSEDE ALAFPEDKLK
 TYTVLPVAYG EPEVIAQLLA SMHAFDYPKH LLQVLLMLEE DDLPTIAAAE AAGVDQVATI
 IKVP

> aaRXA01753 (1-1539, translated) 513 residues

MSNPSLEPLE PIELSDGTEI EVSDVDPEPQ AGNAQMEVPS LRTYVFRGII AIACLIIGFY
 ESFVLMWQNL RIGVANYSL VVLMIVLFI GLDRKRARAL NIHDREVDYI IGGIVVLIAI
 TIKSQLLPRF VDWETLLRLD MFALLFFAFG ISGLVFGMRS TFSFAPGWIL LFGYNAVAHL
 IISVIFGGGF WGPVMANIIG LSLAVLVSSN RDLVQATYLA LMTVLFVVI AIIWALTDG
 SKFLTLPVAV LATITVVLVS SRWRLGQWKI RRRQPTVEKA GPALIAVVVA TALLAWIPTP
 YVERVNNLPG LQMLAKPAPG VIAPIGWHID DVQYINWASR YFGPGSSLLR QMTDRAYHNE
 AWDPDGLDRT VVVDTLQSAE RFQQRAGFDE TLYSTLRGRK SDTVQVDLGY GVDGRYTVL
 DETDFLTYYK LVFEWQTTNN TVEKISVIAV DDHRAEAKFP ELAPSVTRMF IQVATILFRG
 NDTVTDNTQ LKDLDLVSQV GRQIVAEQQV GRS

> aaRXA01754 (1-1941, translated) 647 residues

VKIKSVFLST ALSASLLGI TPPVLGATIN PSLPLSALSS SDDIAVPNFA KELPLAFDVP
 AGTVPQSLSG TLQIPAEFSG GVVEFYDGDR LFHTLRLEVN DSRHIEVPL QSVPVEDGRA
 TFWLRAMLDP VNNQWCYEEQ EVRFIDGNVT FEGATINPAV VADYFPSVLR ALTIYVPENP
 SEAVQEATLE VATSLDSVYR RSGLDVNVET LPTGTDAPPT RPQDFERQIV LVDEATESNT
 QKTELNVPGQ DNAFLRLNGN ADELVDQARL LTDATLPLAV DTEVTASGFG DVPNLSTDVA
 TLQELGITQL TSESVARTSV TLGIERSRLR TYSQSMDLHI TGTYTPLPPQ NAGQITFSIG
 DTVLDSLTTD DTGIIDREFN VPGDLVNRYT AIVVEFTSTG DVNCGVTQPV GLNIDSDSLV
 TSQHSDVPVL NGFRSLPQSF QPRVDVAFAD PSVQELSRV SVVLGIQSMS SQIRIRPHLVN
 WDEAVASERP TIFIDAAGAK TDQVPSYLAQ QGQTLTITSK NDQNADGEQL TRSLQTNAAL
 VVGSIQAVWD ADKKRTVIVA SSQDNPPDL ALISWGMEDR ERWSDLNGDL IVKVRDREP
 QLTTVEAPDQ PGRSATAFIA IGVSLVVIAL IVAAVSVSR RSQKGYK

> aaRXA01760 (1-282, translated) 94 residues

MAAFLEITLK INDEGRPSAA GYQYEQPF LSSIAGATSK ELLIREEDVQ VLHGCDTVAN
 AEDYLVSELF TADVVGGLAP LLQADPEIRI YQVA

> aaRXA01761 (1-1518, translated) 506 residues

ADANADFVDG VVDGAGRASF SNAAYSSDGT TLDGEGASVD AQGNPLHADG TPMSAAEAEM
 KMAGLSSSGT MMEKSGVKSS GITTAADVMD DQSLASSVTE SGLSKIPPTY GADVSGAAGT
 VGTGADYSA TDSSAGLNMS EAALQSGTPM GALAGGSVSS SDQAMNDAAL QIAASQGLAP
 AGSIAGMEQL SAQATEAPAG KAGKQLGDLS GSALNTQLAS MGQQVGDSVN SAYAAGMG
 VDVAGKVTEA AQHLSQVPGQ IQNAVNTADA GSSGASFGQM AQGAAGIAGV AGVIGAAGAA
 SSSAQGAGTV QGAMGNAAAG AGMINNAVSG GATGSTGAH VVNASHGPVA PGQAHYQESG
 HAQAFVQNNQ ANTAHTANTR APSSAQIMGA NVAGSLASQA VRGIGQPGQM GANVRDAMGG
 SGRSGGRGGA TQGGGGAQRS GVSANNGIRA QRGQKPSVTG QAMNAAMRSA AVSGRMANMD
 GNSVGGTEAD PQQGSQVTEK GDKGVK

> aaRXA01765 (1-942, translated) 314 residues

MSNNVVKYEC AVDADNIVAV DMHVHLEVDS CGHKSMPADI MAASSKYFKT AERTPSADAI
 ADIYREHKMA AVVFTIDART QMGHLPSID DLVASCARNN DVLIPFGSVD PRTGEDALVE
 ARRQVEELGV RGFKFHPSVQ GFDPSAPEFY PLWELLESFG LPCVFHTGQN GMGAGLPGGR
 GIKLRFNSPM LLDDVAADFP NLTIIMAHPS VPWQDEANSI ATHKANVFID LSGWSPKYFP

ESLVRQSNV LSKKVLFGTD FPLITPEKWL AAFANLPLKD EVRPGILKDN AVKVLGLAAS
TERGSQAEKV VQHA

> aaRXA01767 (1-336, translated) 112 residues
MIDHKLWFNT VTNNASVREA AGKCDIPIRT LNEQLNRRIL PEKTVIALAR AYDLSPVDAL
VRTGHLTEEE AGSREEDASP DSADDYPTWA LNSHLDYGIL GAFGDIAEEV NS

> aaRXA01768 (1-378, translated) 126 residues
MSESTSSANS TTILNDTFNP KPGVPYARVD NLEFATRDEF RAWATAEMEA GNVISATIAN
APREDRIKSF VMDLVRDGID DAAEEIVSRI DSGDFTMKEA LTAIAASIND LDADDVSDI
VENHFN

> aaRXA01769 (1-429, translated) 143 residues
LGRAPHSLFF PIGFYTPMT SITTTDTPLY TALPHTRISD AELLTPTTTV HEILVYGPAA
CPGCTATLDF FARKNMPATK VTVAAGDVAH TYITQDLGYL QAPIVTVRIS SSASNHDNEH
NTQILHWSGV NRYLMQALSR THF

> aaRXA01770 (1-3765, translated) 1255 residues
MPIIIDNLNS DDDSTIGTAT EYNPDTDADL LDAINADADL DGDATISTNA TEEGVDAAAE
KPKKKRKAPA LKPKGLTAKF FHRDLTGVG RTGRLNKNVH PTNPDL SYQP VSDVYTPQSA
DHKGIKTRYI LTHPTPAVL SESISNAFHV STLRRNNNVN NSDSELAAP YLYQLDIPQL
DQMINVADIC DYHFHGYNLW VDFTPQTIAL RSGKTVLDDG TTASDNTHV YRVTVHVIA
GQDHGSTLLD DQGNQVLD RD DNPSTPSIK RIGAVTDLFD HNPFGFASVN SFAFVDFSWD
PATTLVMDLN LND SYLSNHI NIASSPTPIA LDMVVLNEWS EKS YQLCERV VAQAKLINSN
KITAHVSDVI KQNAHNILWF TEQMNPGTTN LSEVPISKKS MLPMSRQLRI LEHYDVPLTA
YSALFWTUSA IKNESMVQYL VRQNMQLTSL SNLDALNSIV SQLPVPDKDV VAASGYQIQP
HFSTQQREAI TTDNPLAIQ AGAGTGKSTV ILERIEYLCA AGTNPEEIAV LSFTNAAADN
ITAKNDKVT MTISKMVHEI YAHNFPDHEI STIDTIINTL DIEYGDQMV SDYMIQLRDL
LYKVMQTGGN ANLTALSIFM ESHIEAFISV LDQIKQTSLE LEIICYLLL DKLIEPHASP
KYLIIDEVQD NSVFEFVFAL RFAAKHNTSL YLVGDSSQTL YEFRSANPKA LNSLEASGVF
GTYRLTNYR SNQEILDFAN IHLSDIEANQ FAGIQLYANS FDAPTADSF EKVELDMHHV
SKQSEFTDSI PYFMESNKAR FDAAILNNEQ TIVLAHSGRE IRAAQALAE MYP SITVRNL
QSDKGFNNTV FSTFIKDFWF EVTAVDPAHA AFTFTSQVTA HLDKLVRGKR EQMEDRVIRS
MAAWWRENER DIQGWVQQTQ SGAITNEEFF YRLRQCILDY EIRNNRARQS MLNARNNANK
EAVAQEKPLL MVSTIHSAG LEFDNVIVLQ KPSSDAEMTE EGKRATYVAL TRAKKRELII
AGSTRAYPRI VTDYEQIVDL LEKRDEERKI KEEEAALAT LEAEQETRAL AAAEAQAQAL
LLEHNPWLRD LSDEEVTALT EQEIINNVEP ALQIEEEEE ARALAAEPA IQQYLSQFAP
DEFPDDNVA NTVVHVAPQP ILHQAVPADV TVQSSTAPVT PVVADLEVTT VAADPVEPTI
VAAQPEVDDN LVYSTSTPNS HSDVIAVNSD TSENAAVNPV LSDIEALRAI FNNQD

> aaRXA01771 (1-702, translated) 234 residues
MHQAGQLIND PSQGLWRTSA LRSPVARVGH AVLRQRAGEI SRMQGREFSR PGDQFRQVDL
RRRLIQVHPQ SIPTADAMAV TITMALTAAT IDPVKFVADS QNPDEEIIYA AQIALREMI
AMPLEDFIGV RIDLEPVLVA AQAAAKNVGV EVSSILLKDL NLPQEYSGAL QESIVAKIQA
ETDLERARNE VKTTRARLAS AKVLEQNPIL AKIRMIEALP PGSTIEVREG DSKA

> aaRXA01773 (1-411, translated) 137 residues
MITHIQAGLH LGGCRAAGLL PIPAHIDHIV RLTAADFYDT QSAPQLLSNT VLDVLDTTTQ
DLKALWPVAE HIATTIPESE NVLIHCQMG I NRSALMTRV LMLRNDCTAD EAIALLRDRR
SPFVLNEHF VEQLRAL

> aaRXA01774 (1-783, translated) 261 residues
MSPNFQARGT TAPTVALSMR QIAHIREEIK KSPLAASVFI TPTTKQM VVR DLES LFQQLY
HTDLPEPSIK DSGLISAIGS SAGNTNNPAL ALETQMAYHL VLAMHHTDVA TWHKVVTKNI
TESAAAQDAA VEHS AKYDAV YDAAQLMGIT VEEGNGVGSIA IAFSTARADG KSDWCVSGIS
RYIEVTEALD AARAVTKNTD ALNKTALPDV QPAPVVHSAQ FMNKSADHG VNTAEKDQPT
CLKTVHLQPH RYPRTGFKAI Q

> aaRXA01775 (1-564, translated) 188 residues
MSYSLIISKA PTHSM PFNEA ELLELVDELH SDNTVKKPVI VPLPDDFSYT VDSAVRLHDL
GVDQELTDWI TAQVAAAYPN QIVSEIAAAP DPQAKTLFSA NAYNTRSF GT FWTEHPITQL

QYKRCYQIVI ENVTVGVYHPL PVDNYRYVPP VTPSLPQPVY HEAIALNESD VADHGTRAAK
HAMINRRNV

> aaRXA01776 (1-1452, translated) 484 residues

MTHTDTPAPA HGVTPSEFAV TSHELTTSPT PSPTQVAIAA QEKIRQRKLE ELKAKKRTDT
TAQPLLPAPV LHTRPLPSPN PPRPSPAPT TGHWELLIVR SQQKKMTAAN PFLKFLHLGK
AFNVKDLGLT CDRTTDVDLS RLGKLNPPSS LILELATALD LHPFLSVALS SHSAVNARRN
QLELTLLHND TQGTALGHSV TMVQLPEVIN RAAVEPYIKP KGSGNDPLDQ SLNHRAPTVS
DVQKALVQEN TGTATDSNNY LLPFPDPSGA PKTTALNAPN KDLLQARHEL AYIPEIPAIA
SWLDHLDPIM RVHRSLALSI FVPVQLLRAAV ENLPHNVTDL HNHLDPEDLL PEELTTWLDH
LFDADLTALA SCPQLAPPV RSHNHAKAIA AITVTSVMDA LIAKTLDAHD DPLPSLPEFV
ELLRDAVAQL AAHFKQQRGE VLPQPNGLRY ATDFGLLSYI ADGLHEYALA IDFGLIYPNE
LITE

> aaRXA01777 (1-459, translated) 153 residues

MSRIITAPVH KPYIIAREVK GVSHVHDTV GKWQATLHTL KPGPSWPKPS QFTAPKSTSI
WFIIVATHPR NPRARKGTL GRGGYELKD TDLNFLTERQ DLLATSTSRD PEDCRLRFNS
RHDAAAFLLHA NARHINKLFH PALGHARYDL IDV

> aaRXA01778 (1-1137, translated) 379 residues

MLYQHTTRGL IISDAIIAKI SQVNQLLLLR PTLLQDKDMH HATLSSDTPS IRSRRRSYRE
NKAAYATTST IRNRETFEST SDIDFAILMI QDVQESLVSF DPTLAQDMKP RTNAVISALN
ELREPLDTFY RAHEYGDIIS DGAYEFDHAA IDAQHSLSEL VAGLHNYDNL MFPQETAPLM
SESNGIQLAQ YYKSTKLDES QLTVEPNEPG ISIMWHAHDF TWSCLVRYDD MNRYPEHFSI
SFKDMLIPEQ IYTFHFTPRE AMQLRKGLFN AIAAYKSQTW GDENTDLTKA ELEFGGTSMT
FRAGLSQLSV TGPPDHRQVF CLSSSGREDH NTPPNMRDGH VIDIAVTQLS TLRNLIRVLC
TTHPDHSPAL LPYGQYTI

> aaRXA01779 (1-1419, translated) 473 residues

MRYTPRTHRA LGLAALTATA LLLSSCSTTA DLLGADSV AQ AVTDGGSALD PTAHVLTIT
NATAMTLAEL PENTDPDAAN NTEPTMAQSA LKRIYGLEIA ADGTLIAVAA PLTSRNSGSE
QPTVAAMADP ENNAELTTAH ILEIDPATGT ATPRQDIALT EDFQTMASFF SQIRNGWGT
QLIGQHPDDP KQPIRSADTW TVTGSTQITG FNTNTPTGTE DAAVTMPATE PAVGLCALES
GSDAPLDEHR ELSTSALRTA SVLSSSGSAT LKLHDPMVMS ATGIVQARAY VDGEVINQHE
IGDLREQLGI TIEESEAAQA ESDAQAAATDH PLAALGLSNP TSSALVPGLA ELDCLSAQDA
ATWHNRDTSI GTGKPSVLAV INAEMADDF LQLLSSGATT AETQLAQLPD ETAFVLIDPS
SGAVTDLFFI QSLNTDLPAP TTQINSIAVD ERDPNIIYAT FSGDDHLYQM MLG

> aaRXA01780 (1-375, translated) 125 residues

MTFLHPKAAF YPLTMDHLTD LGLDPEQLIN ELPTITYDVQ PHNVFVLQFS TADVRVYQEG
NTLFIRSAEL INPELRQRQR TQLNDDLNNP ASLRVCDEIS GRSTVFLKDK SVVTHDHGTN
CCDSA

> aaRXA01781 (1-261, translated) 87 residues

VLSLTITGPI AVIPHNPEA SAKAVATKHK HTLSGATSDH PYAGMTLKDM IEQGFTLTPL
EFPLCAVDDP TSDRTMHVI NVREHSM

> aaRXA01782 (1-396, translated) 132 residues

MTTFALIASP NNVDPTAESP LAIEIHTDED SSYPLGLIDS DHLVPAVIYG DMVIYTKTLL
AQTPPDDVST ASAFFDKLTA LDAQGRTRDL VYSATYSQLV IAGHNRTVLT DDSEFYDEFY
QVIEAAPGVI LK

> aaRXA01783 (1-237, translated) 79 residues

MINLFAAALP AFEPLSITSI LVLGAVALIC GLPVFLALEK SAELDDLFAA LIIAVLLGFA
AYTFVLPKLV ELGCTICQL

> aaRXA01785 (1-576, translated) 192 residues

VDQFVEFGGG QANINPDGSA TVDWECSFSI NFYDGLVPFT ITNPHLEVS AGTGVLTGDL
TSYAVEMSNP NEKTPLTDLY EDVTITTFGG VNLDPGCVVT SNPDYDGVIV DVPLDATSQV
TSGAGWGAWP QGFDFHFDI NLPYWYSSD GAGDPKKAPM SFNVDFTN GP GLVNSQLLHR
QVISMPETKA VS

> aaRXA01787 (1-354, translated) 118 residues
 TEKIDKAQPP VDQLGSFLHG LETSVADLGV GDRVFLPRFS TFDKKLGRYR IHTVLGFAEN
 DPFNPMTSSE RFKGGPYVDM FDNQDNANFP NSYITTDTVR IVVDPVPETN PDDEKAGR

> aaRXA01788 (1-441, translated) 147 residues
 MSRSYPYII SFAPADDLHG VGGFEWVPAS TPENKAAFT TFDQFDDSR NNGGSHIVRL
 LNISDPNITA DMTQDDITAY LDSNIDRWES TEHALKQFVP LNAGADRVPT GGADHITHA
 CRIITVQRSC TRIHLRCGCI PTPQHRP

> aaRXA01789 (1-642, translated) 214 residues
 MPHNPIELHT NDVLDALDID AICDDVFLYT DFEHTPGQLD RFEQLAFTKI YDMLETAAEK
 FPDVAINDTL STGNHAAEQY FLANPGNIIV LTSFALNQTD LRDLIISPCI KYTAHARALM
 RAVTRTLCTA NNPVERATIF PVSANALSI EALCSEYHAF RTKQVLNTAA LINPDNTLIP
 MLLSKAYEAY AWHKGVESAQ RGSNLAREYY AGLI

> aaRXA01790 (1-60, translated) 20 residues
 VLIAEDIRDM DDYGEDHPDL

> aaRXA01791 (1-363, translated) 121 residues
 MTSP TTLKPW SIRGPIDGEY TMLEAYPFQY VANTRPAIML YALDENGVE QYADLTINLA
 DVELKQLNHV IINPDLDADV TELCISAGLL RPGVLGQHGV GSTTAKVYRL TERADGWLQL
 F

> aaRXA01792 (1-273, translated) 91 residues
 MPQY TITITD EQKAVLHSLT NPHIATAEHG AITAIEIHDD HDVVVYHVQP DGTLYTERLV
 EGFHYGWTRF DSEGFEIDSD NNRVVDGLRD E

> aaRXA01793 (1-234, translated) 78 residues
 MAQYRVSFIA LAESTIEVEA DSPEEALDLA NAEFDYPVTL AGDPYELHDW EARAIEIWL
 TSSTPQQRLG EHVVKIED

> aaRXA01794 (1-234, translated) 78 residues
 MATHRVHFVA TASAYIDVEA DSPEDAIEKA YDLAGDLPGL IADNEFDLGE WEVQADVQWP
 DNSVPREQRL EEGVDLLD

> aaRXA01796 (1-483, translated) 161 residues
 FYCPSDQDAY VDLTLFDQMR QFGAENAPLA QMYIVAHEYG HHVQNLEGTL GLSNYNDPGA
 DSNVAKIELQ ADCYAGIWAN HSSEGPDP LL QPITESELD S ALLAASAVGD DNIQQRSGGD
 VNPESWTHGS SQQRKDAFLA GYNTGQMSAC DFLGRGVYND A

> aaRXA01799 (1-1194, translated) 398 residues
 MEIPLPTSLI DVITD GALGQ TCIDQAF AAQ LGRVTGVEFN LSDDKTAAEV RINKASGSPF
 DTTGEVIAWI NNQEF EWVST RGEDLGLPEL QGIQPLDDDL ITAARTLYSN APAFIAPLRD
 GRRALVAINH TPKLVGIRRT LIEGLQALKP GTDLKRALTS FAAFCELGIR FDDNRISFSD
 GTSLLLRGGK VIEIAGGLSL RDVRADAAFM SAEHQLLFDA ISSSHNVTFD PHTNVATVAN
 EHQVHAIP LA VIDGTRWVWT WSLKELNGQA TEGLARFGFD NGLLLLTNAE ILAEEATAFN
 LIDVAKQVLN TWHTIVQQP DGTGIVLLLD HPRLQLPPAS HAAVEATLYH QLPGDIDARR
 AVASYAAHRQ LPFDGYALT V EGQQVGVTFD GEHLTKVG

> aaRXA01800 (1-720, translated) 240 residues
 VKPLGKIAVP WTWYLGIVGV IIFDVVAIT MLTLVPNKMP ERVNSGLVAL GGSYAPPMSR
 ETLIARVIAG AVLVLVISLG ISLLISAQSK NLASDHPDAS AIQIARRWAF LNNIQSCIGW
 FSFFLAAILS ISSRLNPG ATTHLEMAVY IIAVSVLAWA LMISLRGQV AIDRAIPIRE
 DDSELKWGMI YHDASDKRVF VELDDGHTTV INMARGGAWL LIAVMVLPAL AIVGWVLLN

> aaRXA01803 (1-960, translated) 320 residues
 MRKKKDGQNL PDFRKNPPKL DKKAYEKELK RLQAEVL DLQ QWVETGARV VIVMEGRDAA
 GKGS AIKRIT QYLNPRSARI EALPTNSRE KGQWYFQRYI EKLPTAGEIV IFDRSWYNRA
 GVERVMGFCT SQEYRRFLHQ APIFERLLVE DGIHLRKYWF SVSDEEQIER FEDRLSDPLR
 RWKLSPMDLQ SITRWEDYSR AKDEMFIHTD IPSAPWYTV SEKKRSRIN VISHLLSTIP

YEKIDRPLPE IPHRPDSESD YVRPPRDEFR YVPDVAAHLE EERIKKEEKA KKAKKPAKAA
GKNSDKQKSS GGKGKKKSKK

> aaRXA01804 (1-321, translated) 107 residues
MHIVNIREFKP KAKYVDTFRY TVDKFTESTR TEEGCLYFDW FRNTDYPGEY LVIGVWTDEG
ATEHKKSEHF LRAQETLPPL LQQTPIIQS EFSKKKGWER FSDFTVY

~~> aaRXA01805 (1-330, translated) 110 residues~~
~~VVVVILINVK FKPLPEYVDT FREQVAEFTE KTRAEEGNIF FDWSINTDNP NEFILIEAFQ~~
~~DDAAEAHVNS DHFKAACELF PTILSETPEI INTLIEGKTE WDRMAEFAVN~~

> aaRXA01806 (1-480, translated) 160 residues
MSSLDNAPLL ELDVQEWVNH EGLSNEDLRG KVVVVVEVFQM LCPGCVNHGV PQAQKIHRMI
DESQVQVIGL HSVFEHHDVM TPEALKVFID EFGIKFPVAV DMPREGQRIP STMKKYRLEG
TPSIILADRK GRIRQVQFGQ VDDFVLGLLL GSSLSETDET

> aaRXA01809 (1-636, translated) 212 residues
HIRHEQAMRD GHQDLSVFGV ADGAIMLEEL KNRYQRPPEN EPHDDDVTM IKTTEETEKE
NVEMDQDIIV VDNVDEQVVV TPAHDADSVV VVAEQVVASE PTPEVPVKVE HVEMSVDLAG
ETITPIDQAI RSFMQLNGIE HSVVLRRLGL MTQVAHNKEL DEVYAKALAE GESHAQQQHE
LEAENERLKK EVDALAAELS AALMGEGGGD HD

> aaRXA01812 (1-1230, translated) 410 residues
SFNDVDPAVT HPHLTVIYPP LTPASEEKFN KITSVAAVSK RPTTLPYFRA DGSPTRGFAN
FSTGGIHGAE YNEDRFHDQ DLHTVATREF FAILDATLAA LYAAHQAEPE SADYQIAQDA
LAWAKNVLSQ QKLIKSPQL YNPETGVITYE WEFVAQAQAW IRNKPVEVIL PTGESMTVKH
KSVLASASYP LRDNVAYWRS EPKTPQLFPV AKSGGSSLEK KYNYSVGTG IHEDFSSYP
LLLTNMAAFT NADLGIDEKT GRPRDRYREI YEQKEIYGAQ RKDPSIDEET KQRLGILREG
TKLILNSATG AADAGHDTP I LMNNRVIAMR IIGQLFSWRI GQAQSLAGAT IISTNTDGLY
SVLDMGTNR VLDEHATAIG VQIEPEELDI VSKDSNSRAE FLNGYINAA

> aaRXA01813 (1-630, translated) 210 residues
MVAIVVVAIV VVGFIYVQGG GSKAAKLGDR DYEDTSLAME VGSDSITLTS ANTSADAKSV
QLFEDFSCSH CSELSLATDA DMKTQIEDGN LVVEIKPLNF LDRENIDGHS THALAAALAV
ADSNDATLYW NFRAFLMEDQ SEIYNQWSDD DFADGVEALG ADSSVVDIAIR TATTSSAHTT
WQPQTVKNSL KKPAACSYHA FFKTARMLKA

> aaRXA01815 (1-792, translated) 264 residues
MNRSTISVPE ARQQFRAGLI QPTSGWSAGE AQANLISMPQ DLAYDFLLFA QRNPKPCPIL
EVLNAGETFG GIFGSNATEA DIRTDAPQYR IYAHGELIDS PASAVDYWRD DLVSFIIGCS
FTFEHPMVQA GVPVRHLEAG RNVPMYETSL ACRPAGSLSG NLVVSRLMIP ASQVADAVRI
TSRYPVHGA PVHIGDPSLI GIDDINNPDP GDAPLSEPSD VPFVWACGVT PQAMVMSSKP
PLAITHAPGH MLITDAPDLG FQVP

> aaRXA01816 (1-732, translated) 244 residues
VQLLHTPAAI SISFDDPNLI STAGLVPTMA LAEDRLTVPT DKGANPGAKI TTLIAGMVAG
ADSIDDIDAL RHGGMHRFLD WIYAPSTLGS FLRAFTFGHV RQLDAVASRF LVGLATQAPA
LVPVDASTSD YVFIDVDDTI IKVHGHQKQG AGFGYSGIRG LNALLATVTT PESAPVVVAQ
RLRKGSCGSP RGAGRLIADA VATTRRLPGM EDEKILLRAD SAFYGHPSIS AAIKAGADVS
SRCG

> aaRXA01817 (1-633, translated) 211 residues
MTPNVKKAIA QVPDDAWQTI KYTNAIFDED TGRWISVAEV AEIPFTAFTS RKKTDHIPGL
LVVRRIPELN NKDVDQPGFL DLHRFHAVFT TADPGILDTV AADKTHRQHA IIEQVNADV
ASALAHMPSG VFTANSALV CAVMAFNLTR TAGVIAAGAM ARATTATIRR KLVAVPARIA
RSARRLILHL PRNWRWETQW SRLCDHGRLP P

> aaRXA01820 (1-1374, translated) 458 residues
MSASFDDPNL ISLAGLVPTM HLADAASLST LAQDRLSITG DKGANAGAKI ASLVAGMVAG
ADSIDDMV L RHGGMRRLFD RIYAPSTLGS FLRAFTFGHV RQLDAVASRF LVNLRQAPH
LVPPPPAGSG GNGYVFVDVD DTIIEVHGHT KQGAGFGYSG IRGLNALLAT VTTAQSAPII

VGQRLRKGC GSPRGHRLI ADAMTTTRRL PGMEDKKILV RADSAYYGHV SVSVALRSGA
 DVSVTVRMTN NVKKAIVAIP EDWQTIQYT DAIFDEASQS WISLAQVAEV PFTAFSTRKK
 ADHVPGRLLV RRIPELNKKD VYQPGFLDLH RFHAVFTTAD PGVLDTVAAD KTHRQHAIIE
 QVNADLKASA LAHLPSGTFT ANSAWLVCV MAFNLTRATG VIAAGGMAKA TTATIRRTLM
 AVPARVARRS RRLVLHLPEG WTWQPQWQKL FDHGHSP

> aaRXA01825 (1-270, translated) 90 residues

MPKARVTKNE TAPVSSNPSA NRTPVKINSA GTPMWKVIM FAFMIVGLAW LIINYLVGPQ
 IPFMADLGAW NYGIGFGLMI IGLLMTMGWR

> aaRXA01831 (1-462, translated) 154 residues

MDSLVLGLR IALLVVLWFF VLMALRAMRA DLKVTGQAST SSSSVAAPQG LARAFNRSSP
 PRLLTVVEGP LAGSSIEVSE DMTMGRSPEC TFVVGDDYAS GMHARVFKRG SEWFVEDLDS
 RNGTFVGGTR IDQPEQIAVG TDIRIGRTAV RLVP

> aaRXA01834 (1-702, translated) 234 residues

MLGGGGAILA IPLLIYGFSF SATQATAASL IIIGLGALIG LISQYAAGHV RLKEGLSFGL
 LGLVGSFVGS HLASNIPDSL LLSGFAILTL VVALTMISKL RSTREYITRR PSILAIALSA
 TGVGFLTGFF GVGGGFAIVP ALIFALGFSM RQASATSLV IAVNSAIAMG FRYSDLASID
 WSVISPIIIT TVLGAFSGVK LAKKVKASSL QLGFAFLIF ISIMYMGFQNF PDLF

> aaRXA01842 (1-918, translated) 306 residues

MSKVYVSNEY GGPENQELIT RNTPPGPGE LGVKVHAAGV NPLDWKVRSG VAGTPRELPA
 PLGEEASGIV TAVGDGVEGF AVGDPVLGLV APGVGGYAE TLLVAESTVL KPEEISFTDA
 AAIPVAGASA YAGTHQVELE PGQSLILINGA GGGVGLMAAQ IGRVHKFQVV GVDHEDKREL
 IESTGAIFVA TGDAVAEQVR ALLPDGVDVV FDLVGGEALR VVAPLAKNPA HVISAADAAT
 VGELGGQVLR RTPEMVQIT GVVQYGLVDP KVDTTYPLEQ AGKALAHVEQ GHARGKIVLE
 LITSQD

> aaRXA01844 (1-180, translated) 60 residues

VVSIAQELEI IEDGTGAVLV SEQATTDFNG FIGYSYFTTG TDGATCITDL RLRASPLPQV

> aaRXA01845 (1-408, translated) 136 residues

MISNSWAIET TCALYLPVEA LAEVVDAYPQ LALAIMRMQQ DQLVRSRERE TAQTTSTVEQ
 RVAAALQHLD AKLGQIRQDG SLLQVRLRR DDVAGTTVES ASRAMARMKK TGVIDSGREW
 IAITNHQALA DLVAGL

> aaRXA01846 (1-258, translated) 86 residues

MSIPGNVSYV AQGGTGWDGA DQYTTGESWD LQSFLENSTD YLMIIGSLL ALVGGAAVIW
 GFVNVMRKLF GGQSQQIQW FTILL

> aaRXA01847 (1-735, translated) 245 residues

MLIVLPPSET KTHGGSGKPL DFHLSFPSL TKARQTILAD LQALEVDEAL KVLGISEKLR
 PEAESNRALE TSPTMPAIFR YSGVLYDALD AATLPEKALE RLAIQSALFG VIHATDPIPH
 YRLSGGTKLP TKSSELPTMK ARWGTSISEA LIDVNQLVID LRSPTYQLG RVKDAVTVRV
 ESMEDGSRK VVSHFNKHYK GELARVLALS EKEAHTAEDV MSIAQAAGLV VEENPNHKT
 LTLV

> aaRXA01856 (1-546, translated) 182 residues

MNPFLSDTLI VQQTSSFLSN NFEIYNPDGE VVIRIKTEGS LGSRLVKGDR RFTLEDAFGT
 PLMQVRDPMN FVRDYEIDD PNGNPIAHVR KRFTFFNCRM DIELPGDRVI EMHGNFLGFE
 FEFRMGDRIP AKVTRKWSGA NGYLGRSTY ALIFDEEAPD EIRKVIIGGM VALDLIREKE
 RN

> aaRXA01857 (1-651, translated) 217 residues

MASRRFRMML TASITAASLG FSLTPAIADE AVTVATAPSV GFDSGVERDA PFTAVPHDVV
 LGVGATQSEL IFNWITAQGL TGQVAQISLD DTFASPITVD AVSENVSIIVN TEGDSRDRAE
 GEYVEYRDGA VNRATVDSL AENTTYSYRVG SEADGWSEVQ TFNTGTGDN WNFLFFGDTQ
 LYNTHSNRAE EVQNWANNLE RRPTNRKPRN LLHLPLRG

> aaRXA01858 (1-573, translated) 191 residues

MFMTPRALTE DNELTLALKS LGGLMVSPNE CSVVTEVMPT WRELWHQRLR WQRGALENLG
 AYGITPQTTR YWFQQLGIGY GALALVAYFA VIIITFLARD QWIWYPFWML LGLLFMIERV
 LTVWRSTWFA RFVAALLIPE LIYASYLNLV FLKGVDILL AKQAHWGEHG DKTMQVADAA
 AEINDEGEER R

> aaRXA01870 (1-675, translated) 225 residues
 VGVAVVLLLL PTLINLVVPD KANDYKQLEI DLLGVDWSVP ITTEESA AVL CEETSDEITQ
~~KYWDNCNGDTT VVTMIVEGVK DPSNTLRRMV GSSLITSVDD SLEAVSSEDG RAHALYVPGQ~~
 QEGSLWTLPI VALSVQSGSD YEDLTAIAII NGTSLDYIST HIWSSMAADR GLPYQQDFPL
 MLEEEPWQDT PGGDRPFELP NDFFDQYPDL FPGGSVIPNL EGESL

> aaRXA01871 (1-963, translated) 321 residues
 MSRMFSITLW VAILLSTPAL FLSLATFIFV DGISVLVNIV FAVLYLVVIV FLLSRTPLWP
 RFKSGSGSKKG GGFAWAASSL LWGAFVGFGEI VMLFAGPVMD LTDKLGWDFV AMSFTGAYPE
 EIAKALGVAI ILLSFRQLNR PWHGFITGAL VGLGFEVNE LLYGATGAIM DPNADLDGVL
 MMWQYRTMLG PLIHTLLTGF AGYGIALAFF RARKTVAWRW GVAIGWTLIA FALHFSWNLM
 WENVIGSYVT IIVSVVMYG LAIYILWSNW AEARNDSYA FVPGIITNTK DLSLLDAPIP
 VGAEPESRI PQQIEEPKAE N

> aaRXA01874 (1-348, translated) 116 residues
 VIAYVASACC LPFGAFAGAL LSKELSGHLQ ERVLLTHTVI NFLGFVGF AA LGSLSVLFAA
 IWRTKIRHNF TPWSVGIMAV SLPIIVTGIL LNNGYVAAQA WPRTWQHGCW PWWGGG

> aaRXA01875 (1-798, translated) 266 residues
 VDSLNLKGVA ASDIVAIVRN EEKAADLKAR GIALGVATFE DEALTAALAE GVDRLVFISG
 SEVGQRVAQH TNVINAAKAA GVTFIAYTSL INLGTSKLAL APEHIATEKL LAESGIDHAL
 LRNGWYWENY ESSIGAAKAT GKVFGAAEGA RVSAARKDY AEA AVVITS DNQAGKVYEL
 AGAPALTYPE IAAGIGEVIG SEAEYVNL SV EEYQNALEQA GVPAEFAALL AGMDPIIAEG
 ALYSDSTDLQ DLIGRPSTSI VEALSS

> aaRXA01877 (1-1065, translated) 355 residues
 LRLATGGVLA TLLIGGVTAATK KDIIVDV NGEQMSLV TM SGTVEGVLAQ AGVELGDQDI
 VSPSLDSSIS DEDTVTVRTA KQVALVVEGQ IQNVTTTAVS VEDLLQEVGG ITGADA VDAD
 LSETIPQESGL KVSVT KPKII SINDGKV TY VSLAAQNVQE ALELRDIELG AQDRINVPLD
 QQLKNNAIQ IDRVDNTEIT ETVSFDAEPT YVDDPEAPAG DETVVEEGAP GTKEVTRTVT
 TVNGQEESS VINEVEITAA KPATISRGTK TVAANSVWDQ LAQCESGGNW AINTGNFGSG
 GLQFHPQTWL AYGGGAFSGD ASGASREQQI SIAEKVQAAQ GWGAWPACTA SLGIR

> aaRXA01879 (1-588, translated) 196 residues
 VKITAKAWAK TNLHLGVGPA HDDGFHELMT VFQIDLFDT VTLTTLDEEL VEEGSVVKQL
 SVTGARGVPE DASNLAWRAV DALVKRRAEK TPLSAVSLHI SKGIPVAGGM AGGSADAAAT
 LRAVDAWIGP FGEDTLLEVA AELGSDVPFC LLGGTMRGTG RGEQLVDMLT RGKHLHWVAA
 MAHGLSTLRY SKSMMS

> aaRXA01880 (1-408, translated) 136 residues
 LGGGRDGAWP VHPEVFKKHD ELNPESHMDI SDLSAALLTG NTAEVGQWLH NDLTSAALS
 RPELRSVLQE GIRSGAHAGI VSGSGPTTVF LCESEHKAQD VKEALIDAGQ VYAAATATGP
 AASTADQRGA HILTVS

> aaRXA01896 (1-579, translated) 193 residues
 ARAALHAWSP TVGVTD DVER WIELDKWGFA RFERGETTHL QQRDRIRAY LNRELD DATC
 DDIYSGYLKA YEQNWTAYPD AKGVLDRAVA TGAPVGILTN GAAPMQQDKL DRTGLGLPEL
 VMLAASTLDS AKPRPEMYAR ALTHLGARTA TIIGDDWTND VAAPREL GWN ALYLDRSGTD
 PRADIHSLDE LFH

> aaRXA01899 (1-786, translated) 262 residues
 MSRTLWAVSD LHVTF AQNQ TVDALMPQDP GDWLIVAGDV AEKIPDVVRT LSALVKRFD
 VIWVPGNHEL FNRKTD RVNG KARYRALVGQ LRAIGVITPE DPYPIFGGVT ICPLFTLYDY
 SFRPLGLTAK QALAQAKIKL DDELA IAPYV DIPAWCAERV TYTEDRLKAT KGPKVLVNH
 PLVIEPTHRL FOKDIALWCG TTATRDWAVR FNALMAIHGH LHIPAETRVD GVSHVEVSLG
 YPFEKHPPHM KRPWPFVPMQ IN

> aaRXA01902 (1-864, translated) 288 residues
 NYDAYNAMYP RPNQVDENYF FEYNNALFLS LDSNDYLDID DDIAFLRDTV AAHGDDKDWI
 VLTYHHSTFS QAYHMDDARI KYQRERLTPV ISELNVDLVL GGHDHIYTRS HLMNGFTPV
 AGREAVVGET LNPKEGEVY LATNSSSGSK FYDFYDFQLG QRYDTGLDFQ ETVDQKKIRT
 YTAVWNQDQV QDYTNVELTP EGLTVTTKDA VSGELVDQFT LSKQDRDEES EVPVEDDKDG
 DNATGSSNLG LAAILAPVLA IFGFVGGFLV GGGSLAEFFA NLGVKMPF

> aaRXA01903 (1-279, translated) 93 residues
 AHLDDRGYI IPAQYPWGYE EIINLPARAT STPAVAPRTE AAPATVSDAE VQSLLEYLRT
 NAFVSRHDGD TTKADIFNKH ADTVNKLAAL RAP

> aaRXA01904 (1-423, translated) 141 residues
 MSISPKNSTG PNENAAAQV AANLANLTSQ ATGSMDETNE QVIKSNEHGS DAYLADIKAS
 REMWAKIALD PNQSEETRKE ARENMARIDE YAREHDKDNK GLLQKLAKNK AELIGTVAVA
 TLGVVAAIAN NGKIPMIQLK K

> aaRXA01905 (1-531, translated) 177 residues
 MKASQTLTRN TRARKLGMGI LAATIMATGA LAGTAPQATA AVDTTAPYVS YVVDIPGKVG
 EPIKPQYLT I SDQSAYTVTF KYMPSWLKYD ANKKMLYGTP TEVDVWTPEV HVVDAHGNKT
 VRYFTVAVP ANTGPSTTTP STSKPSTPQV TPTTPKAPT LPKSTFDWTL WGSIFGF

> aaRXA01906 (1-465, translated) 155 residues
 MSEFPTPTTF HVEPETLSSA TDLTVDAHKI AELLSTTDY RVFYMPRLAG VTPIVSYLYV
 YDGENFLIVG RSTHVPWEY VHYPIKPSRE FGSAIAPVLD DSDDPYDAE VVALVKQYMT
 PTLTPGEGYM QGFYKGLTFT NHLDIHRPLT QIISD

> aaRXA01907 (1-612, translated) 204 residues
 MSAFDELKRN YRYKFTDTWP ANAVTGTGY ANPAFIIISA DAMTQNTHAD SNLITVKEHL
 NTLFPYSVQR KDRAFVSEIY TPINLLEDNP ELAQEILDVL DTLSNNAVFN DAHYSELELE
 RLNEYVIDTL AYDMKSDMMR ALVKARPEAD LEAMEELDIA NIQSWINLHS STVSEHNDGS
 VDDAPFNLSA LAEIYLLQLA DHTV

> aaRXA01908 (1-483, translated) 161 residues
 MHSDRFEHPD NGYGYTIRQD TDAENPMTHH DTKDAALWVH NRPRRGDTVA DKPEGNEILD
 IFAKFICGQH DNDDNPFEVW SDGSDASLI RTKAYVAEHH PELIFDISAK TITGYSQGDW
 LDVVCVTAA TCDELIPADS LIDIYRQWAF GDVWTVIPDS Q

> aaRXA01909 (1-879, translated) 293 residues
 MANFRSKDKD GNVINPNAST KGVDLVVNVY DSAKHVTEKG NTVHFVDVQV AQIPIDADGT
 RANANLAPQT MPHLHLDTKD QQRNTGVAYS DAQIQAMQTV AAQGRNHMTF LLSKDGETVG
 YSMLVKADVM FPKTKDGKSL PAVMNTKSLQ PSGVPISDAM NIQQQFMAV AMNRQAEEAQ
 KAAQAQATQA QAPQVAPQPV MQNQQFQAPV PQGQQPAYAG APVYADAVAH ATAQQQAAAA
 QAPQAPAGNP FNQPPAVAAA LAPQTQPPAV AAALAPQTQQ PAAQPQMDNE PPF

> aaRXA01910 (1-846, translated) 282 residues
 MAFPLLAVAG TVAPVAAGWA KDKFLSNSQN NQQAQNNQMS FGQVNSAQN SGENSGFMG
 QYGNLGAGLA GAATGAGLAY SDFEDGQSLS SKARNMVGKG LAGAGGVFT KLANDAIQAE
 GGSMKASAYS AIASGLGSYL KNGGPGVIKS AMASGAAGFG ADKVHDKLAE SGHEGLADSL
 SGAIQGGGLG YSTLGGVTGA GIGGATGGLA GLAQNYFGGG DDYSNAGASA SGFSANQVNS
 EISTEIPQFA NLGQPQRSEL EQLALPQESR SVDKSYDQGY EA

> aaRXA01911 (1-846, translated) 282 residues
 VFIIAGLPL LYVPIFVTVI VMVVYALLRY EQRMSTVYE EADPVEMDSV IWEGIKCDIA
 SDIAARAEAK KAKKPVASDA VAVGNYIASL RQHMLVETQR RYHHKLGREL HNDPAQLEDY
 GSGLRDCECR ACVVAQKLG TVHAHGTVQA SARKKDRVII GRADGIDVAG WNNHRQEARR
 KTSAAKQLER DAQRKRTQAE RDKEIERKRK AQEFVAEQSG KAAAAQRRAE KKAQKQARVD
 ELVAQKQAAQ EQKTHCKRDK QRAKKAQGRK VGAVDNSAVD DV

> aaRXA01921 (1-939, translated) 313 residues
 HIDIQRLNEK QLFVGLKRL LLLGHQILES DRLSGDDAHV DTNEDVLDLI AYNVSDVVG

RLLAEDPVYS GSFDLRAGLL STYPETVFDH DGTFRQPSTQ MRKDRLTINT SSAQFAARIL
APYRPLRDVP DAIGDMPVVS YLYPDAVAE ATGQKQVNVL DESKKFFYDN ITDPEARAAF
DEVFAFYADI EGRNFNSHNE AIDTQINQLR AYLNQVVAFD AAGYALYDVR TRFEQIFPKD
RSYINDATDM TPRAVSSFDD LVALCDDIRG VLDRGLEISS PNHHEMVDAM RKQLHYIQAF
TVPGTHQRRF NDA

> aaRXA01923 (1-429, translated) 143 residues

~~MSALIKSGSP HHVVVLNGWF GHAAGWGAFD DYLDLGNYTW HFWDYRGYGN RKDDAGEFTL~~
EEISADIVAY IDSIEAEKVS ILGHSMGGVF MQKVLADSAT PIASLVGISA VAAAGTPFDE
DSRKLFTSAG HNPDSRRARI DFT

> aaRXA01930 (1-951, translated) 317 residues

VISTNEIENI HSTRRDIEIA LDESSTSEPK RFSEISHLYL ALAEGKISFP ESPSELRELY
DHLMHGELGK ENELDGEIFR QGPVEIRDSR QKVIHSGFSP ESQIIEGINA IIKLAHSEEE
SNLVGIMMSH FMFESIHPLY DGNGRTGRYL LGIQLSKILS PATALTMSSA INQFRNKYYK
AFHAVEHRLN RGDGTPFFVIS MLELLIAAQE GLIENIKQRI DFLASLEDAI KTLRGTSNFK
NHQINLLYIL GQIQLFGKDE TLSLESAAKF LKVSKATATR YFRTLREMEI VHEVSKRPLR
FALTDKGREI VGLEVKI

> aaRXA01931 (1-654, translated) 218 residues

MSTSFESIPG VTISARKALS TAGFKDLESL AGTNYEEVAG LSGIGARTLE RLQAALVEKR
MSFGGKVPEA EQRTATWTTT DSAAPEATET SESPEYFIQN LDIPRRITHG RLLLEIFNRA
TGQKPYVAGS SIVGYGRVHY RYATGREGIT IRVGFSPRKA KISLYGLTSA PASRELLKKL
GKHSVGVSCS YINKPEDVDL EVLEEMIRIS WEAEPGEC

> aaRXA01941 (1-435, translated) 145 residues

MALTSLLHQL ADKKHSDLSR EDIVPRAFTV PTSTDAHAH QDLEKLNSV LKEQNHLTTV
LGTWSEFLTS NSDNSDILRS SAEGLGLEQ VRDKALEVEQ RIKASAQVDL TDLAHEIEIC
NQHHATLISA IQVRLQSHTA ELRAG

> aaRXA01942 (1-600, translated) 200 residues

MLRIGLTGGI GSGKSTVADL LSSEGFLIVD ADQVARDIVE PGQPALAELA EAFQDILKP
DGTLDRAGLA AKAFVSEEQT ALLNAITHPR IAEESARRFN EAEDQGAKVA VYDMPLLVEK
GLDRKMDLVV VVDVDVEERV RRLVEKRGLT EDDVRRRIAS QVPDDVRLKA ADIVVDNNGT
LEDLHAEASK LIAEILSRVN

> aaRXA01944 (1-384, translated) 128 residues

IRNRLILPD GRTLTPAGIS DSNAWLNMGD SAGKLDFFDA TFALPEDAFT GVAHAWDTTQ
STDGEHHITI SREDGGEISR TIRVDNTAPE LTVSGVEEQ ELRGTEIDA QATDAGAGVK
SVETLLDG

> aaRXA01945 (1-1242, translated) 414 residues

VQLPLTTGSI ALDKGEHTLV IRAEDEVGNR TEKTITFSTP DENPISGDYA PSNGATVGVG
DKLSARASD PSGDTVKMTF LEADSPKIDS GRVRMSSGTV EDAGSVSRAE AKMLERGDVE
KLSSLDGLGM EVTSDAALPY QLFEVDAADA LAADTEVRLN WAGSADGRAQ VIMYVFDGEA
WVEVDRHLTG DELEEFLLQG VVNAEKFAIG GTVTVLIQHS EGFAGADHST RNSDVTAAHP
DDVARSEYDF TLAWESDTQY YNEEFHEHQT NIHDYVLAER ENKNIQFMFH TGDVDDWDQ
PAQWATANPE YQRLDDAGLP YSVLAGNHDV GHTSNDYTEF SRHFGEQRYV DNPWYGESYQ
DNRGHYDLFS AGGIDFINVA MGWGPDEEI AWMNEVLAKH PERVAIINLH EFML

> aaRXA01957 (1-462, translated) 154 residues

MTTRTVSTSA PHVTVNINTA HNKTRTVTNG ARKTNAERGK SCISFRVGPE LFDEFKATCI
DNDISMTKAF EKELRTWVDE HNAGATKKRN THRTYVQAPV GTVATSSIPG LGLFTVFKKS
SDQMWDLES SPLIAQEPMS NMDMHRNGSF ELHL

> aaRXA01958 (1-507, translated) 169 residues

MSKKRDHLTV IPDLESRTHH SRSTQPPTTL PAPQLTIITA PDKHQQLRV VKNTTTPSSV
QPSPINYSFT DPVLEAHYA FQHSELARPT VLDSEHWVRA QEEFDTEHNA AYVRAADQLL
SPFDAYILDN GDVYTKTPRA ISAAEQEEL EHLHEHHICW DEEAFFLLR

> aaRXA01959 (1-381, translated) 127 residues

MPHDVYDVEH IISKQPFCSI FFQLPAAALK PTIQKAATNR DLTCLNTEQI AENLQRYLDT
YSVMHQVRV IEEVTHVRNP HEPDYEFSPQ YGAHISLIGE SYAVNTATNE PYATDSEGHF
LALYFEM

> aaRXA01960 (1-318, translated) 106 residues
MPQHFSQENY RKAPVIMSAP LTIHDLSTN SKLNLKWLTC TVLNSPNLPE PCITVSVNHT
EGMSLVSFEG GHGLTEIANT QLVPVLELPK FNPFEALAIH LEAANN

> aaRXA01961 (1-480, translated) 160 residues
MTDNADNTTD NVTNNSDTNL DYSFDPLPDE PYAYGFELVA ADAHSDSTTT STDTPETVAV
ALKTREDTIN WVNTQRAEGK PDEIRINNPI RSERIAEFVH EMIMHHGLVA CMEDLAILIK
RDKLTQLEAE NAITAWHNLK KESLGQIMGL FYQYVENNTK

> aaRXA01962 (1-570, translated) 190 residues
MSDNTQDNPF SIRYAHDPHQ LALNELVDTA DLPAPTSYMK NPWSGDNTPI AEWRERITQ
WQRTIIVNQ RDDDDLIHVS FPKLGQHIQL NTDDILALVA ACVTPTANDI EATIEENLHS
YPHDTVIMFN ADDLDDALGL VVAVKDASGE HSPRAVWRTN TDHGALDETE LARLILKFGG
SFDDYGVVQH

> aaRXA01963 (1-684, translated) 228 residues
MKNRKKIMST LTTVCAVLGI VAAHPFHSA VIGGSVPSTD SVANAVAKIG PGALNCSGVM
ISPSWALTAR HCVDDINILG DIDTITPITP GIHRNEGNYM GEVYRAPSGD LALININGVH
KGTIAQLPTQ EYPLGTAAQS VGFGGGGVNI RTAESVNMIL TDIYSVRSKG FHHGVGRSHY
LLFDYDSAET GRIHKGDSSG PIFIGDEVVG IMSHGTINKN DGSFDDDES

> aaRXA01964 (1-1326, translated) 442 residues
MTSAVNQKK TTQKVLKPIN TKNYSATDAV QTGQHGSALG SNIGVYTYTA GLDIGNGYVK
GIIEATGDTT GTSVDVIDMP SAATRMSRPT EVPEPDDTAV AVTGADFFNH IDTNFNSPMV
KGNRYRLCGT RSLSARGSL EFDLVGNRSK AEQELSKVLV MAVLAACKAVK DFVAAHGRIP
QVAVEGDPGV LRVHTYLALA LPINEYVGRH HGKAKQFMGD GAANPAVHVH TVNNFETPAT
VQLIFERVEV IAEGASQAQA ITAGGEVLMN GMLADVRSKG LALEGVTAGD VLQARHTIGV
DVGEFTVNFV VFTDGRFNHD ASRAYDKGYG TVLESALQAM DDAGLAHNFN SRKQLADYQL
RPPSALKRNF YTRVEQHVQD EAVFFVQDVA AEFARVLSDV GALTEVAFVY GGGSGPLRDR
LHEALLIKAA EMGSEDTFPV LY

> aaRXA01965 (1-561, translated) 187 residues
MAQKQDTHV SEDDAPWRNV RMRFPETDAI VERFLETQGA RGISLAMRQL IYLFVAEYGD
VEVATVIGLK LVESLQAGAE GSDLFAQLAA GVADVDVAVT RKKAPQOIAP PSTTTTRAPDQ
VNEFVAEAE QPVEESVVEA KVPKQVAPQ PAQKPEQKPE QKSAQPAQSE PDDGFDMDDV
MGQAFGR

> aaRXA01966 (1-657, translated) 219 residues
VSESENNTTP AVAARDRLV WVDLEMTGLD LKRHVIVEVA ALVTDANLNV LGEGVDLVVH
ATEEELAQMD DFVTNMHES GLTEQIRESA VTLKEAEDAV LALIEKHCDP AHPAPLAGNS
IATDRAFIIE HMPRLDEALH YRMVDVSSVK ELARRWYPRV YYKQPEKGLA HRLADIVES
IRELDYYRRS FFVAEPGPTS EQCADDAAQA VDRFAPYFD

> aaRXA01968 (1-1158, translated) 386 residues
VLAIGSLALT GCTIERSDAQ EQSSQSTEV EAEEAQAQPI SVDDGDEDVD PSESVIVKSM
GDGLSKVTMT NEEGYEVESE LSDDGRSWTT AETLGYNRTY TIKATDKNGE TATASFSTAT
PAATTNVALS PLADSVVGVG QTIGFRFGSP VKDRKAAQDA ITVTTSPPKVE GGFYWLNNSE
LRWRPAEYWE PGTEVTVEAD IYKDLGGGV WGETDNATNF TIGDKVEAVA DDATAKTMVY
KNGELLRTMP VSFGRDTSEW ATPNGTYIIG DRNESMIMDS TTFGLGYEEG GYRTPVKYAT
QMSYSGIYVH AAPWSVGAQG SYNTSHGCIN VSTENAQWFQ EAVKRGDIVT VKNTIGETLS
GYDGLGDWNI PWSEWSKGNA DQTSAA

> aaRXA01969 (1-474, translated) 158 residues
KCQRRGLSQD PLYKNRNSLL TTQKWFSPRQ QESLEQLWAY DKAYGALKLA WLAYQAIIDC
YQMGNKREAK KKMRTIIDQL RVLKGPKNEL AQLGRSLFKR LGDVLAYFDV GVSNGPVEAI
NGRLEHLRGI ALGFRNLNHY ILRCLIHSGQ LVHKINAL

> aaRXA01973 (1-582, translated) 194 residues

SAMSKSQDDR KIAELEAQFH SLGLNNTLV TLDDAASLLG VPAGIHQIEA EVMLVNFGDG
ADGMGGDTTK FLHYQPDSE PYVWVMKRVY SFEAMKKLMV GLFIGLCILI VGGPALGLML
GGFIGVLIGL CLGTSAMIV GPFGLMRMKA YPPCMDSPWV YMSQEQWRTA MGAAQQTEVS
FVEHWDNIYG DNLH

> aaRXA01974 (1-1452, translated) 484 residues

MTQVVAGTLV GESINREIDE DKYPYLSSYA APVAVPVREI IGREEVNKI MAALMRPEIS
NVMLVGPAGS GKTTLVQQAL VKDPERNYIE VDVAKMVDL STPAQMAARI KGVFEDAIAI
RKHEGHELV FVDEFHQIVQ LSNAAVEAIK PILAMSGVLG VRVIAATTLE EFHEHIRPNQ
ALTERLQEI LTPTDQKTTV AILRGMADRY GVSDQFYDDH VFEQIYSTTE RFMPSSVQPR
KSIRVLDAMV GWHRLSGKPM DMDLLGDVLH DAIGVDIAFK VDGTSIKDKL DEKVMAQSLA
TTVVARRLQL VVADLHDKSR PLSNFLFTGP TGVGKTELVK QLARVLFGDD TGRLIRFDM
EFALESSDL FRSELTRVA DQGNAILLD EVEKADRAIA RLLQLVLDG RLSDDYNDREV
SFLNTYIVMT TNAGSEIFET ISNYATDDTG DGRAIKDFVK NIHTSIKNKG FPPELLGRVD
EIVP

> aaRXA01976 (1-1521, translated) 507 residues

MTQTLGERR IVTTAELKAM LARGDKVFLP GVAARAPIL DNFDPADRAR LDVPAADNEI
VSVEFSRRDT VQCISIADRD HLYITDDMIP THNTSNIIFL KSTDEMIKT LVDWSGERHV
VRRNSKTVTR DLAQLVMRTE GKVSYSATE KEPVVSNDL NTLPSQNAIV FRAGQYPVWS
RNETIWPMSF MLFANQIIQP GREYSLQTIPTLSSANEFDV NQNAIDFMAM LEKRMASIR
TQRAVDIYK ATGLDDSDIA RLMDVYSAE IMDIVDTMIA KDEYDDTPDY DEGDESMNA
RDFMESEYDV FDDEFEDSAQ GFPVATGTKV KKKSLSEAE VNDEFIHDQE NAEHKLADMR
LKRYAEGKVS RDMLADQFGH ILQDSLEDEL TAAYDESLHA FAQDPNFRVT ANNGLVNAV
GTVLIEALSQ EDIALMRAQA GVEQSRVYSE GEEALSGTED DPLSAMGKYK TTRAFRIMLV
ELPHWRDLAQ GHFDKEVARA FRRIEDA

> aaRXA01977 (1-576, translated) 192 residues

MLRTLFRKI RALLLVLMIA PTPLVEGLTS TAMIVSVVIL AIYMAITMYR VVHGRHEFAH
IARMALYVN KTSSRFSVI AYVVLIAIYA LLIPGLVSV TFGFIVPSTP NTFSDAPAWI
MCVSLLLIAV ASFITSIMDD FIDGILTDFY DEDNADSPDS PAEDIATRPV ESATTSALAG
FAVGYICGRF NR

> aaRXA01982 (1-1158, translated) 386 residues

MATTSLPTTI TPDSEETVEK RHSLTPILDS LPCESVPYAL AAGEGQQHQL GPYHLTVMSR
PEDNGGIFSL ARVSAGKTPA TRFFSVAGPT FLYMMEGRLT LWFADGRQEI IAGGSATIPT
NTPWSFACEG LVNSALVYYS SSNAFLHAAE KLGTSSFSHT FRVSGEVTGI PYEELED CGF
TFYERDHLAE LGPHFDRLPE DMKAFALNDG EGDRLEQFEQ INSFVCRPRH TGNQFLAMQT
KGAKTPYIPR HFHRLHTENF ICLDGRVKLH VNGQEIIISR GDYVHAPAGT IHSFAFAGHN
TQMLGVLTTE VFEKFFDYIN TPTNARVQLE DGGKPPFPPE AFAKVQAE LD VVVVGPPRIS
TLDVVTNSRF EPINRTITYR ALDANQ

> aaRXA01987 (1-213, translated) 71 residues

MTFPAQSRRL ARSTTDKWIG GVAGGLAETY GWNPAYVRLA FVASVLFPLP GSQILFYALA
WLIIPSREN R F

> aaRXA01988 (1-318, translated) 106 residues

MIDPLTPVVP ITTGTSVAEL YADAREHLDN GATQVMIPVI SPSNLTLSSV ALGNQEV DAL
GHSEGQAVHS LLEIHTPKRS WPLSELYIDD NEGLAQVSRC FARLVG

> aaRXA01990 (1-999, translated) 333 residues

TSDHVAQFGM ATASAATLPD SIVTSVSYTL NGLSFSDPVE LGISDNDKRE ELLGDITKGE
LRLQMEFSIP DSATAEDEYV FNLTG DGLRF FNSNDRTVPV RNDAGIRVAD LLVSNGGTRG
TLTNFSSDAG TTSRTAALDM ELYGWSSAQ QTGERPIQDW TVGKTEGQVE NKVVRYGVAG
HPWIIISTVQH TWVKSTQTVS HFRSEQDWKI NQPPAVDMGA LAYAAPLG VV GHANVVISN
NNGAGFRGAL VNTPTTRDV ILNFTAADGA TLRERSGGGF EDFDV FSEVP RVEETSTRIS
YSYKNSFEYD EFVAAFPEYR RSCVGTNRVC FSG

> aaRXA01991 (1-795, translated) 265 residues

MTNLLPHFPS TDVAWEPTV VYSADKTTAT ATFKNIPSDI SFSWTGIEAL EPFSPGKTFE

HKVQGSVGEP AGAFTRDNYF TEGELYKHRH ADDLLSGDGL FGNITDGDG NLPSVDDGKD
GDDGSDGSDG RDGVVAIDVV DNADGTVTVT LSDGTTFTLD AGQDGDGLD GLDGTGLTLE
SATPDEDGNI TYVLSDGTEF TVRNGVDGSD GKDGDGVNG TDGVDGSDGK GLVEVSRVTN
DNQSVTITYE DGSQITTKPT PTNWL

> aaRXA01992 (1-450, translated) 150 residues
VYCPFCQHDH SKVIDSRVID AGSAIRRRRE CSKCEGRFTT IEKAVLLVVK RNVTEPFSSR
EKVVTGVRRA CQGRDVSDA LKRLAQVVEE TVRSNGSSQV RANDIGLAIL DPLRELDEVA
YLRFASVYKS FDSADDFEKE IRLMRRRGRD

> aaRXA01996 (1-537, translated) 179 residues
MSKLTGTWTL DPAHTEIKFV ARHAMVTKVR GEFTEYTDSI VVDAENPENS SAKVVIKTAS
VTTGNADRDA HVKGDDFFAV DKFPENTFEA TSFVIKNENE GTVTGDLTIR DTTKSVTLDV
EVGGVAEDPF GNTRLGFEAS TEINRKDFGV DFQAPLSTGG VLVSEKIKIE IDGSAIKAA

> aaRXA01999 (1-471, translated) 157 residues
MTLPPTHST KGSSGRMKRM ALIGSSLIIS MGLITACGSA AAEPEAPAPT VTETVTATVT
TTAKASTITS TVTETTSAD LAQEIVKPAA VEEYSEPQVN TPQQFAAIPE PAPA VAPAQT
YYANCAAVRA AGAAPLYAGS PGYSSKLDRD GDGIACE

> aaRXA02001 (1-549, translated) 183 residues
TRDPIVAAVG IVQAFQTIVS RNHNPEVDLV VSVTQIHTGS ADNIIPETAY INGTVRTFNK
DVQAMVITRM EEIVAGQAAA YGVEATLTYN RNYPATINDA AKAAIAAEVA GEVGLGVNPN
GSRGMGAEDF SYFLEKRPQA YLFVGNNGDSA GLHNPAYNFN DEAAPYGASF LARMAERPLP
LKG

> aaRXA02004 (1-207, translated) 69 residues
RVGRLMRQNG ILIIRS RKF RTTGSDHTFN IAPNFLQQDF MASRPNQKWA GDITYVWTRE
GLGLSGRHS

> aaRXA02006 (1-495, translated) 165 residues
MTVAHKRSLT WIKRLSATTF AAFLGIQLVT PAHSIENTTQ IPESELHNLG LTDEEIQEFN
QYLIDESLFQ ETVETSPIVV SDNEDAAQDP GFGLFTTNPV KHTDEHIGAL YFSDLPGISN
LTCTANYIGG KFWTTAHHCV EGRSRFVGFI EQSDGQYAGI EHVT

> aaRXA02007 (1-429, translated) 143 residues
GITANYAFKG KKVVAWKDLA GIGFKGARTF ARPTSDAEVT LPGVTFNSLP RLEAASHGRI
PDAITASKEA ADGKVVVVQE DGYSVMSKE EYLERQKALG KPVQLNFDDD TDGNTTQTES
VESQETGQAA SETSHRDNPA SQH

> aaRXA02009 (1-123, translated) 41 residues
MTMYNAAKTL VPQIVAFDDT AIIALDQAAE DEFRKANYPE V

> aaRXA02011 (1-318, translated) 106 residues
VANDFIEPND APDAPDNGDS GSSGFVDEAK DKTRSAAQGL GYGALRVGFG TAALAANGAR
SMGNLAKNLW TPMMGLALSA GTGISAATGG MITARVGAML AGTGSA

> aaRXA02013 (1-549, translated) 183 residues
MTESPD LAVS FLAAFNDIEA HLRTQLRAKR SDSFRWMVRI AEQHLISKE QAETLDAFAE
LRNAISHGQY NDLRPIADPR PDTVDTIEKI RSLLLNPPIA LNVLPQKVR SYSLEDPVSR
ALEVVHTTEI SQFPIYKGTE YVALLTTNTI ARWVASDLHD NAQLDARSIK EVLDYAESSD
TAV

> aaRXA02014 (1-396, translated) 132 residues
ISLQLQAIST FPTDPEGVWT SFNQLLFDRG LGSLVPALAP ESLDDLPEV SALRRTEKN
TTTTLINLAKQ HGLVHHDIAP GTYIVGLITI SRPPITALAT ISENSHKALL GLYLSGLKHG
MMANIGEHDG KS

> aaRXA02019 (1-492, translated) 164 residues
AGTKVEASDL GLQAIPTSL PSTSYDSIDD VVGLVAASTL SSGEIATKPR FVGTELINSI
ATNVTDSLLV EEINMVPLSL AEPSVIPLQ HGD TISVVSQ DPTGLPENI AAGGTIVLAG

GTD PSTILIA LPQSIAEKVA AQLNTPLAV VLTGDRANNY TTEE

> aaRXA02021 (1-948, translated) 316 residues

MSENIRGAQA VGIANIAMDG TILDTWYPEP QIFNPDQWAE RYPLEVGTTR LGANELTPRM
LQLVKLDQDR LVEQVAVRTV IPDLSQPPVD AHDVYLRHL LSHRLVRPHE MHMQNTLELL
SDVVWTKGP CLPENFEWVR GALRSGLIH VYCVDR LPRM VDYVPPGVR ISEAERVRLG
AYLAPGTSVL REGFVSFNSG TLGAAKVEGR LSSGVVIGEG SEIGLSSTIQ SPRDEQRRRL
PLSIGQNCNF GVSSGIIGVS LGDNCDIGNN IVLDGDTPIW FAADEELRTI DSIEGQANWS
IKRESGFHEP VARLKA

> aaRXA02023 (1-768, translated) 256 residues

MAPKQTPSPE KNRNLVGPVL QRRQTEGTFD QRLLEMRA DH NWKHADPWRV LRIQSEFVAG
FDALHEMPKA VTVFGSARIK EDHPYKAGV ELGEKLVAAD YAVVTGGGPG LMEAPNKGAS
EANGLSVGLG IELPHEQHNL PYVDLGLNFR YFFARKTMFL KYSQAFVCLP GGFGTLDEL F
EVL CMVQTGK VTNFPVLIG TEFWAGLV DW IRHRLVEEGM IDEKDVDRML VTDDL DQAVK
FIVDAHAGLD VARLHN

> aaRXA02032 (1-570, translated) 190 residues

MPFLQISLLS IGVAADAFAC SVVRGTAIQV NLFKRALVLA GIFGVFQAAM PLIGWFIGRF
FAGITFIAEI DHWIAFALLG IVG TKMIWDA FQPEDDETIV DDGRVQFRPA IILGLATSID
ALAVGMGLAF VEVSILKVAL SMGSITFALS LAGAWIGHHG GKFGKWATI LGGIILIGIG
ANIVYEHL SA

> aaRXA02036 (1-381, translated) 127 residues

VHIPFGHLAD TVSWDCGGGS CATNDLVSLF MPAAFMSTLA ACVFGAWAIG LIAPALFIAV
TAWAFRSGVQ AAIADGYTSA TSVGFEMTVS LILFIIAGLC FLGWIPMF IN NRQVARKVRE
RAAGLSN

> aaRXA02039 (1-810, translated) 270 residues

TSTSTTAPLW LVGTLVWLAV QAVMHDGELY HVEVPTIALV IGFGAQLLIG VMSYLLPSTM
GGGASAVRTG THILNTAGLF RWT LINGGLA IWLLTDNSWL RVVVSLLSIG ALAVFVILLP
KAVRAQRGVI TKKREPITPP EEPRLNQITA GISVLALILA AFGGLNPGVA PVASSNEDVY
AVTITAGDMV FIPDVIEVPA GKSLEVTMLN EDDMVHDLKF ANGVQTGRVA PGDEITVTVG
DISEDMDGWC TIAGHRAQGM DLEV KVAAPN

> aaRXA02040 (1-528, translated) 176 residues

YIPFVIWSDL GEAAEGENFA RFWSWLKSRR DKARQQQTF GVFCYASNGE NHWMLSTARR
FFGKVKGVDP EQEIRSFIS DQWDMFAVA RSQLVGPGGL GLKQLAPAAG FHWEEDFAG
EDSLHAYLIA STAAEPEAEA ARAQLLSYNG DDCRATAAVR HWLRQGARTA PVLGNI

> aaRXA02045 (1-261, translated) 87 residues

MNFATIFGSI FEVTLVGILL GAGLPALFAL GIRFAHSPSS NGTNALGKIA STICFAIIAV
AIIAGILWVT KATIIQYSGF DIFGTEG

> aaRXA02046 (1-264, translated) 88 residues

MKETLT TGLT HQMTYIVPAN RTVPHLLPEA AEFETMPDVL ATGYMVGII E WACMELLRPH
LDDGEISLGT HVNFSHAAPT VPGSTVTI

> aaRXA02049 (1-447, translated) 149 residues

VRYLT LATII AGLSGFVVII IAAWALGDSS QLSEFTAYW GLFFAGTGVL TGLTQETTRA
VTAGSRGGS R GGRAGSVVGF RPFLFSFVVA AIVLVVLGAS APLWIGQLS NLQGVGVGLL
AVGLASYAIQ ATISGIFVRL PIVEKSMPR

> aaRXA02050 (1-372, translated) 124 residues

LAIVWAVGLV GAGLAWLVGP WILDVVLQKE LFAVPGWLLA MLTLGATTTA SLMVSGCAAI
AFERHGIYLT GWVVATVVAV GFLLGPF DLG VAAGLALIVG PLCGLLVHMG AFVGGDRNRV
LTAG

> aaRXA02051 (1-498, translated) 166 residues

MVIRALQREE EIVLLSAGAL GIHEKTVERT IRGKRIPGTQ KTVHVQYSYT GKLIGIDASDV
EIKSAGDNKL SITIFE FIFI GYDDLKFKTI AEDDGWISFS TDDIDTAEVV SEIMSQENFV

EQVTTNREML EDQAVDFYND LLHEFTEKLD TDRYEDTKIE LEFEFE

> aaRXA02053 (1-579, translated) 193 residues
 MSLSVVEAIT NRRATRKYTD EAPTPELIDK IVDLALEAPS AFNAQQREIV VITDPAQKQK
 LYEASHQKQF LTAPVTFIIV ARVENEPEDL EEILGTERAE RVAGFINGRS IQQAREATLR
 DASLAAAFLL LAAQAEGSLT SPTTGWDEEK VKEAIGLGGR EDRAIALVIA TGFPNEQPEH
 PGRLQNRRIID NSY

> aaRXA02057 (1-531, translated) 177 residues
 MKRICAVAIS SVLLLSGCSS TSTTQLEGFD GRSAQEIIITE LDQTPVADRA TNLMASIRAD
 ELILSDQSGQ LSLDMPADEF YISAAPYTTT THECFYHSLT TCTGELANTP VKVTVVADNG
 ETILEEDTIT YDNGFVGMWL PRNIDATLTI EHDGLKSTQP ISTGDDAPTC ITTAEALA

> aaRXA02058 (1-552, translated) 184 residues
 VQIVSPNGEI ESFVLGKLYE TALVERGRSA SVQLIDGDLQ EQLSMLRDDS TDLVIACSGQ
 LLEYNPDILA SEFAVEYANQ TAFDKNSEGEW REKVIDALQG SLPDSIVATD PSNAIGCKDD
 TSLPQNIVPI YRKPNLDRDN RDTLNFVSGS LGTSDLEALV KDAQTTGTTS ETALDFLLSK
 GFSR

> aaRXA02059 (1-495, translated) 165 residues
 MTQPRPDAAS VSLEKKRPEG WPGVSFETYP EAQAAVDLLS DNAFPVTELT IVGVDLIEVE
 RVTGRLTWGR VIAGGMASGA WLGLFFGIVM ALMSGFWFSS IAAGIGMGLV FGIVGAAPVY
 AASKGKRDFE SSTQIVAGRY DVICSPERAR EARDMIALKT RDLRQ

> aaRXA02066 (1-492, translated) 164 residues
 MFNSDTTANL QAKSRDRAGS KAKRSRPSFD SVARDVLDVR TKTAQVKNA KEFSSVDHLS
 ADAAMFVDN ELSRGAMHRA RLHIVHCAEC REEINRQRET VDYLSECKN EEVSAPMDLK
 ARLASLATEC MPGPGAENLA MQRPESEFVAK VESVVRVRK NQGR

> aaRXA02067 (1-456, translated) 152 residues
 VGWGEIFLLV VVGLVVIGPE RLPRLIQDAR AALLAARTAI DNAKQSLDSD FGSEFDEIRK
 PLTQVAQYSR MSPKTAITKA LFDNDSSFLD DFDPKKIMAE GTEGEAQRNK QAADNNANV
 ERPADGSTAR PTQNDPKDGP NYSGGVSWTD II

> aaRXA02069 (1-579, translated) 193 residues
 MADFNRSELD SPLFGSRKRF KFDDDTIGAY AEKVARFFGT GQYLFWQTIF VVVWIFLNIG
 GWAWSWDPYP FILLNLAFST QAAYAAPLIL LAQNRQEDRD KHTILADRRR AEETKADTEF
 LARELAGVRL ALGDTVTRDY LRHELEDLRG LLDRIEAKLD DEASRIADR HEQHGSGPQD
 LSDPTQGDVA DEF

> aaRXA02070 (1-1098, translated) 366 residues
 MTQVTESAVR SALSIVEDPE IGKPITELGM VKSVSIDGSD VQVEVYLTIA ACPMKTTIVT
 NTEAALKDID GVGQVHVTTD VMSDEQRRAL RVSLRGETSE PVIQFAQPGS TTRVYAVASG
 KGGVKGSSMT VNLAALAKR GLSVGILDAD IYGHVPGML GSDQRPQVD DMIMPPQAHG
 VKMISIAHFT EGNAPVVWRG PMLHRAIQQF LTDVFWGDLQ ILLDLPPGT GDIAITVAQL
 IPNAELLIVT TPQAAAAEVA ERAGTISVQT NQKVAGVIEN MSAMVLPDGT TMDVFGTGGG
 QKIADRLTAV TGEVVKVIGS VPLDPNLRIG GDVGNPIAIS EPHSPTAAAI NEIAEHLAHR
 KVSPTK

> aaRXA02071 (1-453, translated) 151 residues
 MSNSPTDVST SAPRIMIAPD SYKGTATASE AAQYLGEGLV EILPNASITL APMADGGEGT
 SSVFQGQVIT LPTTNAAGRL TEASYTLDSE TNTAYIDIAA ASGLPAVADD LVPTTGDTYG
 TGVLIADAVT RGATRIALGL GGSATTDAGS G

> aaRXA02076 (1-534, translated) 178 residues
 MKSPFIFDVA ALLRGSALPE HLTQSGPSPT RIGPEMIAIP EGKGVIVEAQ IIPLGGLAV
 EADIEAQLLQ QCSRCLRELT PTKTLHVSEV FAADPDFVTG EDAADDEDEL PMVNQDQIDL
 LQSVIDEAGL TLPFNPVCEE LGYGACQDDE TPAPDGVSEE VEDEEKVDPR WAGLEKFL

> aaRXA02080 (1-807, translated) 269 residues
 MSIEWLQIVE LGAIFGAGFL AGSINVIVGA GTLVSPFPIV FLGLPPLTAT IANTIGIVPG

SISGVVAYRR ELHAHVKTIR FLLPASILGG ITGASLLLF SADVFTAVIP WLIGFGTLLV
 IAGPSIKKHV GAHTSGGISA GFRQLPFPSR TTFIVSVCGA LLLGMYGGYF SAAQGILLIA
 LLGITSTLQM QELNAIKNLT VAAVNLIAAS VFIIISPELI SWPTVALIAL GSALGGYIGG
 RYARRLRPSV FRAFVVIVGI TTVIVMTIG

> aaRXA02081 (1-1629, translated) 543 residues

MTLSGLELLE FERRTAAMET RIGRHNRGAG GAFPEAVVSR SVELPLFVQA RNFLNNQQIR
~~AQVHRRILEQ~~ ~~LPTGEFVLL~~ ~~GHSLSGVIAA~~ ~~DLRRRLPPEL~~ ~~TVKGFVTIGS~~ ~~PLANGQFNVD~~
 DLFKLLRTPL SNVSWVNFV SGSDPVAAKR GVSVAVPWVL DFRVKTSLVP GPGHSSREYC
 ANDAVAEAIG FGLFGSRKE IVLAEKNLQI PLNDAEIFVL QALRYCYLIL QRLKGDEALR
 YEYALRETQD RLIEEIKSRN AEEGRPIPK IARLDFDNGD PNAAAPVPGL SPFMPKEQAI
 ERLLIIGQN LLLPFEIEVP EKIQREALRD FTAETQLGST VGADIFDALQ MAVGVVSGSA
 KSNWRKWGAF GVGAAALTA TGGALAAVP TVAGVATVAS TLAAFGPGGM MGGLVTAGTL
 LTVGGGSLTA GVLSSVNTTE EIEALVVQKL SLAILWQRHE IDRTHEVWEE FAEAERLIVR
 EHTRVKNVSD SSSPILKAFE QQRSTIERAL KYLSDHGMEP GWFELEPPA PTPFLKLRAK
 KTD

> aaRXA02084 (1-345, translated) 115 residues

VIIIASVVFL LVGAMLANAA AALFSASEPF GRISYLIGLP NEDDFVPYSL RFVAFFPLML
 SASMAASFFG VWAVLIIPFG YFPSLMMVHK HNKQVQRTWD SVTVADFYED STPLV

> aaRXA02089 (1-471, translated) 157 residues

MSSIYSATRY AAHFKSVFPT ALDDIQSMMR HPRSLARAIP TWRPPSIPLP SLPGEDPLTL
 TLSRHRAGPA ARQIREFGE QREPAYLITI RITSPEGFKV STRLAEGWIR AILSTAHSQT
 VHQLTDEPAP TFCWLVDHF DPVRSPSFLF EYSKSA

> aaRXA02090 (1-801, translated) 267 residues

MSFFEDIAAG LDSDGIESRV NGDTMFVPIT SDLEIQFVEI DSSLPAANVY IAAANVDEDD
 DEFEAVLVSV VFSVEDAVAA VAKHVATDQV VTVLRDLLEG TDERIQDLEF FQDAVNANLV
 RAEVGQNSL QVLVEVEDGV PTATVNFIAI GESFEDLIDQ AIEELWESDG DAVLSDEDRQ
 RMFADLTSEL EFVTDEVLDL GTFTDFDRLF DILSLADDQA EDWEAQLVPF EDEEFDEPDV
 YDLFVDDSEE DDDDLDDDED DEDDED

> aaRXA02091 (1-651, translated) 217 residues

MSIWKRLLVQ YPRFADTLTA GQPITLEELA TPEVILEAVA KGQEIFGIEQ PKHAAQLWFH
 SLCTAIVGPA VTAMVEFDVI PSLDIRRGQL HNIDGYWFGF RPEEMLVDAS LHLSGTQFGE
 SIRVIDALC AATDLRPAPL WAVASDALGI AASGAGVEAF EEEHAREVAE ALIEGMNSVN
 SVSPSRFNDD DYFIRAGCCM IFHSRADFC TSCPQKR

> aaRXA02094 (1-717, translated) 239 residues

MAEHNAITD AVHSDPAVLE DNAGFSGKYL IRALDKAAHM QTGAIEGYIS WLRKHNPEKT
 PAQLQVLVDK HFMRLATGSG AGVGMAAAMP GIGFVTGALA VGAESLVFLD AAAFYTMASA
 HLRGIDIRHP ERRRGLILVV LLGTAGKAIV DAGVGDLSSK NHAPGIAISR FNIGGLMEVN
 GRLMRYAVKE VSKRFRSALI GKILPFGIGA VLGTMANRKI AKRTVGNAYD SLGPLPTHF

> aaRXA02097 (1-3372, translated) 1124 residues

MPAGIADMTD SLLGWASQTE LDNLQRLAGV EYFPQIQLRH DELERIHRFY GTFLSRQVGA
 GASLGDLFEM TPCLTVTTLV SRASRISDPA DFFGEYIGGL GLSAEHAADV EGLTEKLFAQ
 AGLLVPEGIA SPLELLSIHA GISNHEVAHV LTVENGTTT YPFMFDAVLR LTPWAQTLI
 GGVQELIEFA TTHRTSWSDR QRESSLPAMI DEIVVAELRE RPVGTAADREN SVGVALREL
 PRLILDAERR KVCLRLPEQR VSDDEINWRV SLEGTTRIFS TRRAWGDTSG YSEALDITVE
 RQIRETTVTD TSNQITWVVP VVDFNDPVLV FSARGENLTD KVSLLHHEIY VLAPAEAKLE
 DMVTGQPVVP IEQFLVEGWN SWVCSRVDAR GLSSLKVNKE VRCIDPRRRV AFHHPAELVP
 HVRISIGLPV HAQSLIAEFP PTLGQDETW MLSISAFAGV GAAGEEIAEP EPLEVPADGG
 LFAIFDPEIY DAPWVGEYLV RLRGPRNESF RPEFAIVEDM TTEFEVASGA SFRIPTTTGL
 SEASLRVRSG EKHFTAEPRL VTVEATDPNA SFVVTTDEGD QMPLRFVPPQ IAIELPLTTE
 PPTWRVTRTV CGPRDLGAG ELRIRTVGVV GDPKVSVRNH HGSPLRTVKM VTPDNGRTWI
 ASMKEIAAST FVMPRGSIEF EWTDRKVDNR VSVTIAVIDK TENFTGITIE DGKLVFEELA
 AGRQLAAWVW PQTAPWVSAV ELAVTGPELE LPEVLVGAGN LIVQLHTADP FTTSVTPLSP
 GKAAVTVEQE GYSAQTEY AQLSAFFGGE VEEPPISDAV VPALWDVSHI WTEQGNTEHL
 PVVHAALRSS PAAALKGLSA SLVPAQALPG KVISSGLAAS PFTTESPATE VHRTAWIGTL

QLLGALPSAF KEAEELGNRT PLLPILQLE EVAGKNILST LATGRDSTLD TACIDQSTVA
 IAGMNETQQK ALLDMFFSNA DIVPGPLMED NTRLMAVFET FKRDALREV LQTEGLIKTA
 VELLRAMRGT QRQLYSSARI RFDKLDGVNT DNPENMWALT PVVSLVFALS SRLHAHELIG
 KTRTLDRASA GWGRIADLVP DLVTGDLISA EAMVLGARNP GLVD

> aaRXA02102 (1-1158, translated) 386 residues

MTSPHSFSVT PIRTMADGTI KQIHPFTGTE VWTVPGRGNR PLSHPASTIV ELSAHDHTSY
 CAFCSDNMLS TPPEKSRIII DSSGDFDILP GALPGELSET TPEFRRV PNL FEIVSEFYWH
 QNFGFMDSE TAMRMAQYLA IPEGREHVLV IVRTRLSAAG EDPAHMTDGE LLEKAPSYFA
 GGHVDVIIGRR HFVDDATTSQ QLASSGTLTV KEHEAFIRLT VDGIRDLYHR NRYAPYVAF
 QNWLKPAGAS FDHLHKQLVA IDERGRILIAD ELHHLRGPN MYNELAVDYA GYHNLIIAEN
 DHAVAFAGFG HRYPTIEIYS KSAIPEPWLQ SDEEIQAMSN LIHACHAATG ADVPCNEGWW
 HKPIDVDMPM PWHVMIKWRV STLAGF

> aaRXA02103 (1-396, translated) 132 residues

MPKIQFDVLV PDTDSIALAG RFTVVANLLI EKGLMDHGVV VHDPAAKIAE AVEEQLRQTY
 RDEHEDADLE ESSVNRYLIE VDGVGKSVNQ VTMIFARLLT PPAELPKDAF LLEQELAYEV
 PAVYPWTVEI LR

> aaRXA02104 (1-420, translated) 140 residues

HACAQLEVDG TKPGMGAAGG IAIGLTWLST LMHGNDQQIH ILPGAPLIAR SNGIEDALPE
 TDLLITGEGR LDSQSFTGKV VGTLLHGLAKA HDVDLAVAAG IVEGGIPDDF LAVEMIKSSD
 VAAQLRDAGR RIAQEYVAQN

> aaRXA02107 (1-342, translated) 114 residues

MDLHKVAAAH AATLPLSTKE FPFGEPEHVV KVRGKVFLLL TILNDEPIIT LKSDPEIGAS
 LRSGFPTIQA GYHMKNVHWL SISDGERITK DFIEGLVEES YELVISTLPK YKRP

> aaRXA02108 (1-435, translated) 145 residues

MTIYAPRSVA HSIPVECHIV EHGRNFTVGS LSVEVLGSEH AMLTHSMPIA ENVGYLINGR
 VLHPGDTFQP IKDVELALVP VNGPWWKMLD VEGYLKKFPP KRFIGIHDGI VNDRGLAINK
 KFLTHLGETY GSEYSPLEEG ESLEI

> aaRXA02109 (1-921, translated) 307 residues

MLAVLFGVVA GAIMPFTSV NNRLRQSVGA PLLASFISFL VGTFSLLVAT WITSGHPYPA
 LGNTTGQPPW IFTGGMLGVV LLTGNILLFP RVGSVQTVIL PISGQIIMGL IIDTTGLAHS
 PQAPLTLFRV LGAAAVLVGS LAAVGVSFVK NIGQTQSQGA SIWLWRLFGV VMGMCQATQV
 AVNGYLGTVL GSPIESALVS FAVGTALFI LLLVTRTKWR GINGAGKKNP WMMWIGGVIG
 ATVIFSTAYL GPIIGTGTVV VMMLLGMMLA SLMIDAFGIL GSPRRHIHA QLLGLVVIIL
 GVTMIRI

> aaRXA02114 (1-486, translated) 162 residues

SIGYAWTTAF HALTPGLGGI AIGIWLLGGV LGGLVIRKPG AAIFVEVVAA CVSAALASQF
 GISTIYSGLA QGIGAEIIFA LFLYRRYSLP TTMLAGMGAG GGAIFFLEFF YGNLAKTMSF
 NIIYSTTVLI SGAILAGLLS WYLVRLART GALDRFAAGR EV

> aaRXA02117 (1-474, translated) 158 residues

VSTDPEEFDQ AETLDQLAYE IILLTRYGVQ NTPTNKREAI MDRSALILLT RLDAQGPMTV
 NELAESFGLN VSTVHRQLKA AIANGLIEVV DDQACPAKLH RPTELGKEKL QQELLARQQD
 LTRILHDWDE EDIKTHAKLL RKHNESLEEY LDMKWPRP

> aaRXA02121 (1-705, translated) 235 residues

MITSPFEREL KLLNEGELGI VQQLVESSNI GFIVDLELDG DYGWAVYKPE LGEQPLWDFP
 PGLYKRERAA FVISEFLGWN IVPPTVIMHD APAGVGSVQW FIENNGEHYF PLFDTRADLH
 PQFVRMAVFD LLCNNTDRKS GHVLLDGDHI WGIDHGLCFS VEPKLRTVIW DFAGCTIPDD
 LVTDVEQLEL DVPEELHQLL HPAEIDALQR RASRISRLPF LPQAKSHRQF PWPLV

> aaRXA02123 (1-1371, translated) 457 residues

VWGVSLPPNV QTVGELKAAG HIYRPLRVEI RDNLLAKLRS GEDPWPGLHG LNYTVIRQLE
 RALIAGHDIV LLGERGQGKT RLLRTLITLL DEWSPPIIPGR DVPEHPLAPN VEISDDQPIE
 WVHRDARYTE KLATPDTSVA DLIGDVPMPR VAEGRS LGDL ETIHYGLIPR ANRGIVAIN

LPDLAERIQV AMLNVMEERD VQIRGYNIRL DLDVLVVASA NPEDYTNRGR IITPLKDRFG
 AEIRTHYPLE LDDEVAIIRQ EAEVVAQVPD ILVEILARYT RALRESSSVN QRSGLVSARFS
 IAGAETVAAA ALRRAAVFGE DEAVARLVLD EAAVEVLGGK IEFESGEEGR EWEILDYLLR
 TATAEALRST LRSLLDLPLI AALDGSITVS TGTNITASEF LASLPGLGES TLYDDIAQAF
 GATTPSTRAM AIELALEGLY LSRKIAKDSG EGETIYG

> aaRXA02124 (1-1956, translated) 652 residues

MATSHSRPRR-SRYGRYTGGP-DPLAPPVDLS-DALRDIADDV-MAGYSPEQAL-REYLRRGARG
 QEGLDDLAWR AAERRRELLS RNNLGGTLAE VRKLLDEGLK LERAQLARDI DMDDTDRAFR
 EMQISNLPES TAAAVSELNS YDWSQEARQ KFEQIRDLLG REMLDQQFSG MKQAMEGASD
 EDKAAIAEML RDLNDLLSKH REGTDTPTDF ANFMAKHGEH FPEQPRDINE LIDALAARSA
 AASRMFNSIS EEQRRELMKL SAQAFGSPEL QELLGDLGN LQGLRPDLNW DGSEQFSGDE
 GMGLGDGTGA MQDLAELDNL AEQLSNSHTD LDIDAIRRQL GDAAVSAET LAKLERALRD
 SGLLRNPDG SLKLSPQAMR RLKALLDAA SEQLSSRPGS RDSRLAGANG EATGASRPYV
 FGDTQPWVDT RTITNALQRT AGTDTGFLR INLDDVEVIE TEARTLNAVA LLVDTSYSMA
 AEGRWVPMKQ TALALHHLVS TRFRGDELAL ITFGRHAQNM DIEELTALPP VHEQGTNLHH
 ALLLAERFFA RHPSMKASLL IVTDGEPTAH LEADGHAWFN WPTDPETMFK TVTQLDKVTK
 RGTHHTTLFRL GHDQGLEHFL NQLADRVGGT VVAPDLGLG AAVVGEYLRH RY

> aaRXA02125 (1-801, translated) 267 residues

MVATSQFIDD SEAAQAVRAA IVAGYRNIDT ALAYGNERGV GEGIRTAGVP REELFISTKL
 AAEEKDYDGA VAAIDESLAK IGLDYVDLML IHSPQPWSDF RGGDYSEGNR EAWRALEDAY
 KAGKIRSIGV SNFLEADLEN ILDSATVAPH VNQLLVHVG N TPSELISFCD SKGILVEAYS
 PIAHGEMLKN QQVKAIADKY NVSIPQLCIR YTIQLGTVSL PKTANPDHMS SNAQIDFEIS
 EEDMAALQEV TARDYGEHSG FVYSGK

> aaRXA02129 (1-234, translated) 78 residues

MKIIFKMASN KFIDNKKGLA MLVFAELVME MLDQPEEQLH NVRGVAIEKR EFLKALTADF
 TSRLKQAQTD KILVWDF

> aaRXA02132 (1-639, translated) 213 residues

VHNFSDVDDE SYAKKNNEIL RDAKRLQISA LCLGLILGGG AVAVYLFNSG AVWMMIAIV
 MVFLALLSFI MIPVIPRQMG NAQTLYDDYE LAPAIIAEVN PRDVLLALV NRNVNPEAKP
 EWALATRTIV RVGAHERRLG ERIPSVAITG RRTVKDQDHW DEISPMPITW GTTDKDIIRE
 AEKTIPHELW AKLEKNRGKL EDVKKTPNNL FKL

> aaRXA02137 (1-798, translated) 266 residues

MVVLPFNDDE VCTPIPDLLG FPCSLLSVKL PWDKNKNNEG ADAAGQDASS TPETATPDAT
 EQKLPKGHTA PKGRPTPKRR EVELERGVVG GQSLAPTDY AQQRQKRKEF KASMTKEEFK
 AYKQKERDAR VKRQRETQAA MDRGEDAYLM DRDKGEVRRF ARDWVDSRRF LSNFVMPVAI
 ALLVVMLIGN FNPSFAATSS MVAMVLMGLF LIEGITTGRR VNKAARTRFP GTTETGFGGLG
 YYAYSRTIQP RKWRTPRARV EIGA EV

> aaRXA02138 (1-342, translated) 114 residues

MTAPSTNTGV ILTESAASKA KALIDQEGRD DLSLRIAVQP GGCSGLRYQL YFDDRTLDGD
 KEDIVGGVRL VVDKMSTPYL LGAQIDFADT IEQQGFTIDN PNAGSSCAG DSN

> aaRXA02141 (1-408, translated) 136 residues

MYGPTVFMAA MAVIYIFATM HVSDGGSVKG VEWVGSVALV LSAGLTMLG VYLHFTEVRV
 DVLPEWEEA EVADKAGTLG FFSPSSIWPA AMSGAVGFLA FGVVYFHYWM IAVGLMLLIF
 TITKLNLYG VPKEKH

> aaRXA02146 (1-627, translated) 209 residues

VGKHRNNNSN ATRKAVAASA VALGATAAIA SPAQAAEVVV PGTGISVDIA GIETTPGLNN
 VPGIDQWIPS LSSQAAPTAY AAVIDAPAAQ AAPAASTGQA IVDAARTKIG SPYGWGATGP
 NAFDCSGLTS WAYSQVGKSI PRTSQAQAAQ GTPVAYS DLQ AGDIVAFYSG ATHVGIYS GH
 GTVIHALNSS TPLSEHSLDY MPFHSAVR

> aaRXA02151 (1-1188, translated) 396 residues

MDWPDIAGI SILGVVLLHV SLAIPGGQDT MMSHLNALLD PLRMLFFMV SGFFAVKVLN
 QSFGEFLFRGR LWFYLVYPYLL WTPVNLYLHR LEGTVFTGRA PGTEWYSGS MLSATNMYWF

LYFLVIFNLF LWATRKLPAW AIVALVASLW LLMPAYSEIE ILRKSIIYLP TFLIGAYFRP
 LISRFAEAAAT RPKAIVFAAV LYVSGLAGLV ISNGLRDSN HGASVLWLMN LRDTFAHALG
 GNLTGFDMDH LPGMIIRIVS LPAGIVLCVW LGRIKPVGEF LKLIGRHTLP IYIGHATGLS
 LIFGFGLRWN FMEIDNFSDS LWHHTNTWMV IAFACAMLGG YLTYLISRVP VLGWTLVPPK
 LPPEPKTPAK AQADSHVKAQ SAKPMNASTS SKTYGI

> aaRXA02152 (1-402, translated) 134 residues

MAIYRKLAAS-AAALALSASL-VACGSEDTT EETSTTSST TSSSSSSSSS-STAATSEESS
 AVEEPAVEAP VEEAPVEAPV EQAPVVEQAP VEQAPAPVQE APAPVEQAPA PVQEAPAADA
 PPALPGGGGG HAGY

> aaRXA02163 (1-753, translated) 251 residues

MAVATFGTIT DMLETGIVS NVGGTDITDL GALLNETQAG TRWSELSPNY QSNRVVQIST
 TDVRTSNSAA MYLSMMSWVK NGGKTVSSTA EADAIPELS QLFVQGYTE STSAGPFDEY
 LSQGMGSKPM VMIYEAQFLA EQNKENSRI GDMELVYPSP TVYSTHTVVS LSDVGAEIGE
 LLETDETLQQ LAVKHGFRPK NSAMIADAGM TDRMPNNLV IDPPDYDFLE RLIDGVGASY
 SATPAEEDTD L

> aaRXA02164 (1-1575, translated) 525 residues

MKNLVKGTAL GLSLVLLAGC STVSDSIDSL GGGGGSSET LKIVAATELE DLQPAIEQAS
 DDLGFDIELS FPGGTLSNSQ ALMDGAFDQD YDATWFATNR YVDLIGASNK LGETTKIATS
 PVAFGVKTSM AQELGWDQRQ PTWELGQAS QTQDFTFGMT DPATSNSGFS ALVAMATAYA
 DTGQALTND IPAIAEPMST SLSGQTITSG SSGWLKDTFL EQPDRANAI NYESVLHTMI
 SEDGADITVV VPADGVVSAD YPLSTITGSD QGEHVAELAG WFAEHPDALT DTYRRPTAN
 ATLPaelSSQ TIEAPFPGS KTVTDALIDA YTNQFRVPGE TTFVLDVSGS MLGQRITLLK
 DTMSDLISGG ATTDLANVSL RDREKVSIIIP FSFGPHEVIS ETLGAVGSPS RTDLQQRVEA
 LQADGGGTGIY DAVLAAYAES AGGDYIPSIV LMTDGELTAG RTYDQFLTEW NALPSNIRSI
 PVFVILYGEA NVADMEQLAA TTGGETFDAI NGDLDEAFKE IRAYQ

> aaRXA02165 (1-612, translated) 204 residues

VPTNNGGSFF FSRKNLAGIA IATLIIALHL VIGLGAFWPV VAIAGYGA AV ALTPKNPPKK
 ELPPVQATPE LDSPGLLAAR SQELVRTMYS HGAAAPVIEA IKRLDSSLQL VIGNWTSLTN
 FPEHQVTIRS IINQYIPGII DAYLKIPTRN DPRAVEDLIE SFDLLNSETM KIFNAIQEQG
 LNNLEDHGRA LRMQFGQLPE EFRE

> aaRXA02166 (1-177, translated) 59 residues

MSLDPQLLEV LACPKDKGPL RYLESEQLLV NERLNLAYRI DDGIPVLLID EATEWTPNN

> aaRXA02168 (1-2814, translated) 938 residues

VSISLTPHL SFKEPAILYA QQASAWQVI ADSSSEDHITA THLRELLSRS RAKTAPFARQ
 ITAIVPGSLA RLEELTRED A QIGADIDAQF AVSIPGILLG QIAATRQLRD LGLDVAAASR
 LGHSQGILGV EAVDNEEDVL AFALLGAAA SQFAGKGAHM LSVRGLSREI IQDTIAGVDG
 VEVSLRNARA HFVVSQKPEA LKKAAAALQR AADVYNEDIN EKRRKGS LAE PKFDYLDVAI
 PFHSSMQDA ADLAVEWATT CGLNVNARAL AEAILVNPAD WVEQIANLKA DYVLSLDAGV
 SRFTAPLLDG RGISLVPAFS AAERDNLARP GFHVPTAEDW SEFAPKLVKL PNGEHKVLTG
 FSRLTGYSPI VLAGMTPTTV DPEIVAAAAAN AGHWAEMAGG GQYSEEVFTK NKEKLVSLLK
 VGRSAQFNSM FFDryMWNLQ FGAQRIVSKA RATGTSINGV VVSAGIPEVE EATELINDLN
 ADGFPYVAFK PGTVDQIRAT LKIADANPET KIIIIQIEDGH AGGHHSWVNL DDLLLTYYAE
 LRSRKNVVVM IGGGIGTPAK AAYYLTGEWS TDLGFPAMPV DGILVGTAAM ATKEATTSPQ
 VKQALVDTPG VDPHDAGGWV GRGDARGGV T SGLSHLHADM YELDND SAAA SRLISSIDSD
 DYADHREELI EAINKTAKPF FGEVEEMTYA EWIQRWVELA YPTQDPTWDD RFLDLVHRIE
 ARLNEAEHGA ITTLFPDHAS VENEEEA VEK LLAAYPQARE IQVSARDAAW FIGLCRKHKK
 PMPWVPAIDA DLARWWGLDT LWQSQNERYG ANSVRVIPGP VSVAGIDRVD EPVAELLGRF
 EAACVDALDG EPEEIFARLN ESKNEREFLL ATPHIVWHGN LIDNPAHV LN EGAFELIEED
 GYWVIRILAD SYFDDLPVEQ RPYLVQHVDI PVELGDAG

> aaRXA02169 (1-846, translated) 282 residues

LDMQINRRGF LKATTGLATI GAASMFMPKA NALGAIKGTV IDYAAGVPSA ASIKNAGHLG
 AVRYVSQRRP GTESWMIGKP VTLAETRAFE QNGLKTASVY QYGKAETADW KNGAAGAATH
 APQAIALHVA AGGPKNRPIY VAIDNPSWS EYTNQIRPYL QAFNVALSAA GYQLGVYGNV
 NVINWAIADG LGEFFWMHNV GSEGIHPRT TIHQIRIDKD TLDGVGIDMN NVYADDWGQW

TPGNAVDDAI PTIPGNSNTG TGTGIDADTI NQVIKILGTL SS

> aaRXA02170 (1-774, translated) 258 residues
VSTVLLAGVV IIGGIFTLPQ KEEVKVSELQ PQASAASIPS SSSTAGKAVE ESPLTQFVEN
STGSQITYMS LKDDFHTGTS TERFARPALS LSKLYIAEYV LEHGTNNEKS LAMEMIKDSS
DVSAEILYEA YPESIEEIIAD QYGLLSTRGD AHWGYSVTST YDLVKFVSAL IIDDPDSPIL
EAMRNASAVA ADGYPQDWGT AVLDEAEGSK WGWSDDLMLH SSVTFGEDYV VAAAVTGSKE
DLTQLVENQL GEVVSQHG

> aaRXA02172 (1-339, translated) 113 residues
VNAEQITQGR RQPTAQEFRD MQASPEFGEL RSKFRSFAFP MTVAFFLWYV VYVLVASFAS
EWMATPVFGA INIGLIFGFL QFVTTFVITY IYVMFANKNL EPRQAIRQK MEG

> aaRXA02177 (1-933, translated) 311 residues
MREIFLISGD STESSLVFKT SEEDGAEFF IAVTDELHAI LAGHSEIKSA PEPEEHKEVP
PPVLEPVAHV EEPREEKEID PRISAPLMS PREIQIRVRS GATIEELAE IGVTPEARVEP
YAHVPVLLERA RIADLAKQSH PIRENGPAKL TLWEILATAF ATRGHDLT TA RWDAYKDATN
QWIVRVWDKA GLSDNYAEWT LNLHNTSNPT ADPRTPVAAD LIDPEFIQPV RTLTSVNSTQ
EQYDDETDVF DTVSPDDAP DSESDAVAEI TNDNEPEVDA EGPRNRRRKA VTPHWEDVLL
GVRANTKRPK K

> aaRXA02178 (1-870, translated) 290 residues
MPSQLGENAA IVTLWFVSAS DPQSIIRSEP RADRGYGRKL LAQLNPTWPI TPIGQFALNR
SVPASANEFY IAGFPGITII QTVLEDVTSK SKLNPRLLRS VPATDVYIFA VNEETTLGGF
AHIYNGEIKR SFIAYEERVF EDNGIPGGFE TPYWAGKKG RTALSPLFN PIELVHEAQR
AWLGFDATTS PDINVVAYAT DGRPEPRIAA PRIINSEEV T RSAVEKLG LR ESIFYDDYEE
YEAPDRVSK RITSNAKKA SSAQKFGKSL WRASREFGSN MAERLRHTDR

> aaRXA02180 (1-1458, translated) 486 residues
MTSGKSTSTR GALDRYFKIS ERGSSIGTEI RAGVVTFAM AYIIILNPLI LGTTPDVEGN
TLGIAQVAAA TALAAGVMTI AFGLIARYPF GIAAGLGINT MVAVTLVSGE GLTWPEAMGL
VVLGDGVVIVI LAVSGFRVAV FRAIPASMKA AISVGIGLFI AMIGLVDAGF VRRIPDAAGT
TVPVTLGIDG SIASWPTFVF VVGVLGCGIL VVRRVRGGLF IGILGTTILA IIAEAFDSEG
ASFENGEANA EGWSLAVPGL PDSFGGIPDL SIVGAVDLIG AFSRIGVVAA TLLIFTLVLA
NFFDAMGTMT ALGKQGNLVD DEGNLPDIKK ALVVEGAGAI VGGAFSASSN TVFADSSAGV
ADGARTGLAN VVTGSLFLAA MFLTPLYEIV PIEAAAPVLV VVGAMMMGQV TEIDFSKFYI
AFPAFLTIVI MPFTYSIANG IGVGFIMYAI MAAAAGKAKQ VHWLMWLVAG LFVVFFAIDP
IMEAVG

> aaRXA02181 (1-678, translated) 226 residues
MVDGHIRNLQ GHIDRLEAAA PTASQFHDRI ITQLREAPGS VQAAVTIENN HYNVELRPPR
KLNSLVTLDT HGHDRERLHP KIKGHDIWQ NTATANSRRQ GADDGLLVDE SGQVIMAINA
SLLAIKGDV FHSTHPRSLP SVLESTVIAY LQEQQCNAKP REQGFNINDL RSSEVWLVD S
LSGIRRVAAW LEYGSKFVPS ETRPVAAFVP TFSEVNDYLW STAQQV

> aaRXA02183 (1-525, translated) 175 residues
MASRKT KRKN LIQILSLIVA VLLVILSVV FQQWNNRPE PLPQEISISA SSPAGEIEVF
PFSMCEPGVE CEENEVPTLE VGADEELHLT IPEAIHDHDW YLLTIYDDPA ANDEFYHTSY
DATEATVPGS VDPTEEGAER PRLVVVEVSA VMIGEDENGE ESPYTVTWSL STMNE

> aaRXA02185 (1-579, translated) 193 residues
MGRHSTKTSS AFTKLAATI AFGAAATIMA PSASAAPDSD WDRLAQCESG GNWAIN TGNG
YHGGLQFSAS TWAAYGGQEF ATYAYQATRE QQIAVAERTL AGQGWGAWPA CSASLGLNSA
PTQRDL SATT STPEPAAAAP AVAEYNAPAA NIAVGSTD LN TIKSTYGAVT GTLAQYGITV
PAEVESYNA FVG

> aaRXA02186 (1-219, translated) 73 residues
LFPEFERMYD MANVEKKHFV DPAWPEHNPA DGHVVTTELIS KVAGASSPWG DDKEFPVSAE
ETGYVHPYTR INR

> aaRXA02187 (1-2199, translated) 733 residues

MKKDSPIPTL KGWLDTSQDD QLSTILRNRP DTVLPLPPNL ASLAARLQLR ASAIRAVLKL
 NALELGVLEA VANLGGELHP VTAPVVEYL HVALAEDLPA QDTIGAALAT LKNFALVYGD
 DQLMIAQETM AALPVHWRLL PEVSDRGQSE EQVRESVDKL SDRHRKLLHT LAASGGFGLT
 RDAAPDADPS RPIPQLLASG LLARVDEQTV RLPAMVRRVI EGREQLPAQV RPIPRTAAPG
 SNDGGIAAGL EVVRHMRLLI DALSHVPAPT LKVGALGVRV VTRLSKELDL DETELARLLS
 LGMASGLIRK GVPDPLPMDD DGGDYVAPT LADEWMEYDL AHQLGTLMSG WWKQTYAPWL
 VGRADDKDKP IHVLSKTSII DSLPDARAKI LSSLSRVLVD NLHADLAFHY PLAASRMNPD
 TITQLVQEAQ WIGAYSQGV T AAGQALIDGE NPTEVIKAPA PVENFIVQGD ETIMVPGPLT
 PAMQKTMSDI ASLESPGLAS VYRLSEKSIR HALDLGLTTP EILEFLKEHS MTDLPQSVGY
 LLSDIARKHG TLRGGPALS IRSDDPALLH SAVEAGADVA LRQIAPTVAI AQAPLLQVIT
 VLRAAGFPV AEDGEGASLN ISPPARVPA ASPPVVPAL DESRVQAAVK AIRRENSASQ
 GTVSTQPTLS VLQAAVRGQR TVTLGFVDKQ GVAVHRVVKP LTVNAGQVDA VDEATGAVHR
 FMLHRITEVI VDN

> aaRXA02199 (1-570, translated) 190 residues
 MTDSTPQGST PGMSPEAILN GTGKPWEEL KLLDDVKATS WTHTHIAKHI VDNFDVSGWW
 AQGIAIGY EY ERGMRKPGMT SDGFAANASK TLNLPVEKVV KLFQDDDLRA QWLDPALIEK
 TSASEPRFTN AKWLADDSRV SVNFTSKGDN KSSFGIQHRR LPDQDSIPVM KAFWKERIAA
 LVEVSKQFSL

> aaRXA02203 (1-378, translated) 126 residues
 MTIRATFQPS VDEFISTLEE FATGSYLKED EKEFWDEPFD VKALPDLRFI LENYLDSDLK
 LGEAPDLDAV NASAQSTLDE LEFNTKHHG AVVEPEEKEE ITKLMFDAK QTGADDLSAE
 AFPEFE

> aaRXA02206 (1-936, translated) 312 residues
 MVGSSGLRVS RLGLGTSTWG SGTELAEEAGD IFKAFINSGG TLIDVSPNYT TGVAEEMLGT
 MLDAEVSRS VVISSSAGVN PALPLGRRVD CSRRNLIAQL DVTLRALNTD YLDLWSVGYW
 DEGTPPHEVA DTLDYAVRTG RVRVYAGVRGY SGWQLAVTHA ASNHAAASAR PVVVAQNEYS
 LLERRAEQEL LPATQHLGVG FFAGAPLGQG VLTAKYRSEI PHDSRAASTG RDAEVQSYLD
 NRGRIIVDAL DTAAGKLGIS PAVTATTWVR DRPGVTAVIV GARTHEQLSH LLKAESVTLT
 TPITQALDDV SL

> aaRXA02207 (1-759, translated) 253 residues
 MRRRSRVSR LIPATALLAST ALLLSACTQG VTDSPDMGKA TPAVSPAASN PDGQVIEFGN
 ITDMEVTDGD ILGVRTDAL AIGTVSDFEA GSQVELDVK QCGDLTATGG TFVLPADGV
 YLIDAKPDL DELRATDKPV TVAALTSDDQ LLVGNGEED LTIYREGEEP ETFTVAGPNT
 QLIAPVIDR HDAVVRTWNE NTTIQDQDYP NDREGATLRV GLGVGMAGG EDGLLVVSDE
 MGGQIAIYNA DDV

> aaRXA02211 (1-453, translated) 151 residues
 MVSVLLIQPR QGEAVAAER RDFLQATGLK PQELTSRMLD TTTSRIGSLE GFDGVIVGGS
 PLNATNFEYS DWQRHVHREL SLLINHPLPT IFVCYGNFTL TFFSGGQIGR THPEDSGATT
 VLLTDAGKRD VLTQDLPSF TSFTGHTENS V

> aaRXA02212 (1-498, translated) 166 residues
 MIPENIDLKQ LASELGDDAV AMGEHTGNQF PTLEKDLINV VTDAKESDFG SLGVVILDET
 PVMTSNLRDI AQELLIQTDL DTVVVRAPMS AAVVSDVHSR AALESQHDH LGTTDYVLGT
 ELLVQDVTE TVGNIDWQQL LIWGLVALAI AVVVAGASVR RKAISL

> aaRXA02216 (1-306, translated) 102 residues
 VAPAPGHVVL ATGPTCPQM LRANKNTWSV QFHADMDAVG MKNRMDFYSN YRFFSPEDYD
 RIIAELPSVD SIYANRVLN FVEVCEGIRV ADGAHQLPK LN

> aaRXA02217 (1-663, translated) 221 residues
 MTNKTRALLI GGHGKVALLA TPMLIDASVQ VTSMYRNPDPH RSEIEALGAT TLERDVTTL
 VEDWADLLK FVVDVWSAGN GGKNGADATY AIDRDAAIAS IDGAASLGEK APYIMVSYI
 GSSTHTIDPS ASFYPAESK KAADEHLSST NLDYLILAPA ALTLDEVNGV EVIADTNEAA
 AGRTTSRVLV AEVITELVVR DFPQTRVLPF VDGESPVSSI S

> aaRXA02218 (1-267, translated) 89 residues

MFAIMTVTGQ DHTGIIAAVS TALAELDVNI HNVSQTIMDQ WFTMILHVGF DESVLDIATV
QERMKPVEKE QGLVIRIQSE ALFNAVNEI

> aaRXA02219 (1-1386, translated) 462 residues

MDDFSASLGF TDRSSRGILD TIEMIEKYRL DIRTVTMGIS LLECARGSME ETATAVYDRV
TSQAARLVEV CEGIERELGI PIVNKRISVT PIALVTAGCS GDPVDVARAL DKAADVGVDN
FIGGYSALVE KGGTTSIRL IRSIPEALST TDVVCVSVNV ASSRAGINMN AVNEMGKVVK
~~QAAELTKDRS AIACAKLVVF ANSVGDNPEM AGAFHGIEEP DCVSVGVSG PGVVSRA LGN~~
LQGATLDQVA EEIKKAAFKI TRTGQLVGAM ASERLGVFPF IVDLSLAPTA EVGDSVANIL
EVMGLDQVGT HGTTAALALL NDAVKKGGMM ACSRVGGLSG SFIPVSEDKG MIDAVRTGAI
SIDKLEAMTA ICSVGLDMIA IPGDTPAETI SGMIADAAI GVMNHKTTAV RVIPVPGTVP
GDEVDFGGLL GYAPVIPVNT VGNSEFIHRG GFIPAPVHGF RN

> aaRXA02221 (1-1362, translated) 454 residues

MFTASIPTYE LGSFSKGSYV EIKGTYFYPD TLNTLFRNSG AKDNEEFFVD VTLVPEPDNP
HSTRGHAI SV RWN DLVIGHI ASDMTEKFQQ VRRVAASGYD ARVSARIWTN TNYKNERDFW
VSVKLPDPDF LVPLNDPPHD GFTLLPYGTA IQVTKESDHM DVLSEFVPPS GQGQILVSLH
IINAGVRKEW DGIEVRLDNQ RIGELTKASS EKFAVVRHF DDLGLSTLCR ALIKGSSSLAA
EVTLYGARAH ELSEEDLEPK SSSPLPRLVE YQSNPFNYQV PNRWPGEQNG RAPKSQKSSS
SPFAAYRGP SPSKSLTPFV AQTPAPQPSD RFIDWDSLLQ PDGTPRATPF QRGVTRGLIG
KHFSNQKSPR IDFATVGQCD AILRTFGEPT DKLYKDGRS WPLWWALMAI VTLLVMLLN
IPGIGPIFPL IGLIVLGHF WTRRKLNPFF GRSK

> aaRXA02223 (1-420, translated) 140 residues

MSTYQDDRF GPDYAPLGE KPSFTLTSTD LENGAKLAEA QLGGTDISPQ LSWSDLPEGT
KSLAITCLDP DAPTGA GFH WAFVNIPTTV TEIPTGAGDE TLGGIEGVVS LKGD SGKRGF
YGAQPPAGHA PHRYLFAVHA

> aaRXA02226 (1-1056, translated) 352 residues

MTENQTPSS SAPKGP RP PG PRPGPRAQ VAAKKA AVAT PAPIAKTSND PAKFGRVEAD
GSAYVTT SAG ERLIGSWQAG TPEEGLAHYG ARFDDLATEV ELMEQRLISH PDDATSIRTK
AEELKATLPT IAAIGDL DGV EARLSKIINN SEEANERAKE QKAKNRERAV ARKEELAVEA
ETLAENSSDW KVAGDRIRAI LDEWKS IHGI DRKTDDELWK RYSRARDSFN RRRGAHFAEL
DRTRASARKL KEELVERANA LKESTEWN DT ARAFRDLMT E WKAAGRAPRE IDDKLWAAFK
GAQDYFFDKR NAVAKERDQE FEANATAKQQ LIDEYDAQIN PEQGLDGARS KL

> aaRXA02227 (1-618, translated) 206 residues

VEDVNATLII MPGSPALVPE LAPADAAGAR LLASLRAVFD AELANDDRPI ELVGSRDEAW
FTKHAGNLRA WGAPSVQVSD GHYLPEILQR VALGGFESRV THVRDLGVS NDNTVTVLAL
DGPTGLTTRA PSALVPGASN IDAWCRSLLS GKPGVPSTS TLIDASLREP QLWL DLSAVA
TEASTAQLLD SDDTHGVGRY VARWTF

> aaRXA02230 (1-537, translated) 179 residues

MGEQLPFANG SRSNKLPLIV IGLCCIMLIL WLKLPGVLLA TIIGVATMSV MRMTSTPET
ASLVTSIRLS AEDISDVQHE WQQFLTSPEA DALADRTLVR PALADPDCGD KAIEKFHYEI
SNANRFLGRL DARLQQNLV SELETLLKVT DERALELRET WLDARKAAQK LGPNYNRES

> aaRXA02231 (1-756, translated) 252 residues

MTSDLKTIGM DFAKWQDAVE AAIASQRLEV TGEVRGGQLI QFSDDSGAQI NILAVEPFAT
FAGFNSATVA YGHVSMINDV LSLVDIIDPF GTPVATITCN LAQGPLLVD PVQRWQQIRI
TALGIDVEVH DNADAYIRNG GETVGMLVSE GAEKIASGSG AVIPDASAEF SARVLSAEYR
TNTLTGQRFI HATVDGLFAF DVCLPDAPEL PARDSVLSGK VMLTAAVIPT EVTGCGSGSG
GCGSGSCGCG GH

> aaRXA02238 (1-285, translated) 95 residues

VTNVSNETNA TKAVFDPPVG ITAPPIDELL DKVTSKYALV IFAAKRARQI NSFYHQADEG
VFEFIGPLVT PQPGKPLSI ALREINAGLL DHEEG

> aaRXA02244 (1-1533, translated) 511 residues

MSLEKSGGFR SRTPKAQQEP AKQKPQARKS PSKKAPARGQ GQSQQQRQQQ SSGKGGGNRK
PPAQAREVRA LGVDKPREIA FEVLDRVRTG EAYANLVLPR LLSKHNLSGR DAAFATEITY

GTLRNVGLLD EVIKAASGRE LSDIDPEVLD VLRLGAYQVM FTRVEDHAAV DTSVKMVGGL
 KKFQATGFAN AILRNITRKE PEQWLKELEP AEELARVAFR TAHPRWIAQS FSQVLPADL
 EAALAADSER PVVHLVARPG EISAEEALALI TGGDEGKYSP YAVYLEGGDP GDIEPVKDGL
 AAVQDEGSQI IARALVEIPV EGTDAGRWLD MCAGPGGKAA LIGALARMR ATVDAVEVSD
 HRARLIEKSV RGLPVKVHV GRTINLTGG YDRALVDAPC SGLGALRRRP EARWRKQESD
 IVELNTLQYE LLESAVNKVR SGGVIVYSTC SPDLRETRGI VDKALGALEI EELEAAEFMP
 GMTDTGDEKS VQMWPFRHGT DAMFVAVLRK K

> aaRXA02254 (1-681, translated) 227 residues
 VIAALTDILG TSQHALDQIA QLAGAKGRII PVCAEPLDLE AEVSGLDSDA RVMRQVRGQV
 AVAATPGQVR RVRIIPDNPE PNPAAIEAIL DADLVTLGPG SWFSSVIPHI LVPGLVDALA
 QTKATKTVVL NLTSEPGETA GFSARHIHV LRQHARNLQV DQVIVDAKTL SSQTERNHVE
 RAARTLGAEV SFHDVQAEDG RGRFTSIHDP AKLCAALLAS FAGARKR

> aaRXA02255 (1-936, translated) 312 residues
 VAKNSVRAAE VSAILRFAGE MQAVGGKLV I EANLDSMQVG MRLQEFIQGL YNSRVDVHTV
 NPTVSRKTPR YLVRIIDNAD EIARRTGLVT RSGHVVKGLA PSVVSGTISD AEAARWGAFI
 ANGSLSDPGR SSSLEVLCPG QESALALVGC ARRIGIAAKT KDSRGFDRVN VRDAEAIGAL
 LTRMGAQKTR MLWEEKRIKR ESRTPTGLA NFDDANLRRS ARAAVAAAAAR VERAMKILGD
 DVPEHLAEAG QLRVQHRQAS LEELGRLADP QMTKDAVAGR IRRLLTMADK RAEDLKIPDT
 NSVVTEDLLE EI

> aaRXA02266 (1-513, translated) 171 residues
 MTQDEHPRQA DSHFNMLLPD GNENAHQLSV ALNQVAHLLA YDADSSIHRP DGLSLASYRI
 LFSLWTDGPM SPLQVTDKTG MKKSAISNLL KPLLAESLIV QVTAENDRRS KVLSLSEKGT
 TYIQKTATRQ NALESEWFGT LTDIEQDLLE SLLRKLLDSN RASKVRKNRS N

> aaRXA02267 (1-873, translated) 291 residues
 VQKWGLSFVE RIVIVNNVQQ FHRFFDDSAV YYPFCFVPLDR AIGEHFDRQN KPMSRFIGTL
 ILPLAKLEEA AQYTGDEVLR VSAVISTDGL ADLRRDFYEL PNIDIASVEI KLVGAALTNT
 AWLGDVEKLI QQHRNTEFVWV EIPTALVTAD IVRKLRRHMG A GLKYRTGGDR EELFPSPQDL
 VTVLRTAIDA ALPFKLTAGL HRALRYRDEK TGRLLHFGFLN IAAAVATLRA GKGEAEALKI
 LEGDDAAPLI HALQSGENWR DSFRSFSTCN VVEPLNTLID LDVLAEGDVH P

> aaRXA02271 (1-558, translated) 186 residues
 MSFLNSAKTK TVALTATFVG AATLATPAIA SADIVDNALA ALPSGEISCS QAEKYWTTEA
 DYNKVAQAN ALAMFDSRGP QIQAAARVD EAAANRCGLKG GTVAAQAEAT EAAPAAPAPA
 PQDNTGTSQT APAPAAPAP AATPVVNLAP AGSPTFTIEV PGVGGVQLPD LYQIVQQFLA
 QFGIKI

> aaRXA02279 (1-1404, translated) 468 residues
 XARATALVDF LESQTVQDLN NPDVQTYLTE AELIRDDLRS WAVIKSNGIG QHRSCSIRRG
 NDEPLAIARK IIEETASHPE LRFENLEAQF SEFTILLAQS PENLDVARYQ ELRTQGNFVQ
 ELALDSIFGQ HAVVQDTGNG EAILDETIGY MIGAGMRETT ARTASQFAQL YSFVGRQERS
 IEMARLAFEE LQAAGLPHRE EELRLGMQLA QVEPIEAREI LEKLLLPKFE QNLTLDELET
 EALLPLGATV AIHDPQAAAA ILRHARENAA GFGNFELAVQ AMTMITDVLY TQNMHEQLE
 ELNHSPLPYAQ MLDDQHQAEL KLLDSIAIVQ ADLGSTEALE TLGTAMGLAE TTAQKLYVQE
 SLNRAYFTFA RPEDCISGAA DASALAMQND DPSNAAQLE QCAQYLFQLG HETDGASLLE
 SAFRVEGIPT EQALYYANAL SSIYEDFGDS AKSQWEQQA QEKQQLLE

> aaRXA02280 (1-753, translated) 251 residues
 ADLAETMLGL LTLETSGRI SIGEITTLIS TEDVSLQLAT TLDDFRQLNT IARPDTLIIN
 GGYIHSDLA RLIPVHYPP L TVSTADLRES MDLMELPPLQ DIEKAKALDA QVTESLKDFQ
 IKGATRVFEP ADVPAVVID SKAQASDRN ETQSATTDWR ADILATVDNT LSRQTANIPQ
 DQGLSALCLN WNSLVKRLA STDDTAVVSR TVRLLYVQAL LSSKRPLRVK ERALLNDSL
 DLVSLSLSSD I

> aaRXA02285 (1-729, translated) 243 residues
 LVLDERWVG V GLVDKWDEGG VEKRLFAAVL CVVGAGRHHV DERGEVRYGG AEAALLSLEG
 RVVGVEVEDG GHEVFARGVF LEAAHEVRNG HVEFLWAHGW YVKQQLTDVN ADGARLIGRH
 ALQHFELHTV RYPTLHREQM CECYVEKVVA GNAQAQALHV FFAHRPIEDA LVIGIGGLFG

RFCGNWPAGD LRVDVLHRQI STLDQANLNA RPACVDALAA ELRQVLDCTE GIGKVRLQHN
SGF

> aaRXA02286 (1-549, translated) 183 residues
MKNAKLFLAL ISAPLILAGC SSTDTGTAES TISSETASAV DATTSTSSST ATSAVIDDDD
VFDIIDIvla QYPDRIITDI DREDSSDQYE VDVVVVGQEV LELDVTTSGQI HTDDRDNDDD
DDIREAHAAT VTAAQAIGLA LDQYPDGIID SVELDEDDGQ LKWKIDLDDT SGNLADVEI
AAV

> aaRXA02287 (1-552, translated) 184 residues
VYSISETIAR TLMPTDHFV DLMGNGNAWF VDALERLGRG IITVRPTVET VAAADTYHRV
TRRPAVATTT YGAGFTNTMT TLADVALSRI PLLLVVGTA SAGPRCFDID RQGLARAVGV
ETFTVHADVV AAVTLQAWNN TPENTHVILE IPYDLAATA TDPTVTTYLL RPFQKLPMPS
PTLS

> aaRXA02294 (1-375, translated) 125 residues
MAKTKLESIS ERNSDDPLSY PDLTLAPIST TVTVVVAEDT PNDNFSELLL GAAESTRLLG
LDELHIIAPS VHLPALAVAA ADIAHHLPEK FQFCEAETCT HLHPDDDTYL TAESVAQLGT
KLKSA

> aaRXA02295 (1-780, translated) 260 residues
MGLELAASGW GILIAGAAVA GWIDAVIGGG GLVLIPLILA VMPQLAPVTA LASNKLAAVT
GTASAAFTLV RRVKPKDKLL ALYVLVAAVC SGAGALAASL IDKQIMRPLI IVLMLVVGLI
VVFKNFPGTG ESKALPTGWK RWAIVAVGL IAAYDGIFGP GTGMFLIMAF TALLSQNFLS
SAAMAKVVNT ATNLGALIVF IIGGHMWWTL GLVLAVANVA GAQLGARTVL GGGTRLIRYA
LLTLVVVMSV YLTWQQIQGM

> aaRXA02296 (1-489, translated) 163 residues
MRNQTIAAVA ALVLLTAATP AIAATPATAG NGLYSIDMGD EQKLTCLVLD EPSTEAHVVA
SCAATFPVTW KLLDGAHEQA AKLEITQAQD GELSVTASKQ PLITMIAPT SITKPITVNR
LVVVPGENEV RFYATDPDVL PVLITPDSYE VLTDSAARKV ATL

> aaRXA02297 (1-1137, translated) 379 residues
LSDKEPDPEH QIPEKPSRKV IALRWCIVAP LSLAVGWLFT MWGVPAAWIL GAILVAGVCA
LTTGQDL PMA KGVHVFGRSI VAMLAALPLI SSSGSELVRF LIPGLVISFF TIAVGIVGGL
LLARSPEIL PETGVLSMLA GGASVMPILA RELGADFRYV ALTQYLRLLV VSMTLPLVTH
FFVPGGADLG SPPEKWLVDL SLGEFGTSIS VLSLLVLFGL VLAGEPLGRL LRLPAPAVMG
PLILTVLVSF VIPDDLSQLP PTVFKIIAFM AIGWMCGGPL NMTALKVFSK QLPATFLFIF
ALLAVCAGAA GLLTWWLDIS FFEAYLATSP GALETVLALS SEGSAGPVVV TIQIIRLLAI
LTIAGLIPTL LRRILRRDR

> aaRXA02298 (1-1659, translated) 553 residues
MTLQSSDKRS PSLLDASSEV FVHDLAALSP TDATAWGISG FEGDLQDFSP DYWNAIAERN
RDMVADVDAF DDGTDDNDDE EDFDDVDRVT ADVLRDRVCL DLALHHQGET LANLNNIDSP
VQTIRDFTLI MPRETDDEVE NLRERLSRVP DALHGYCESL AEAASQGHVA AVRQVEEVVS
QCEDLADEDS VLQHLGLDEN DPVVVEAQEA FARVAGWLAE QLAPHAPHVD AVGRDRYEMF
SHLHVGEFVD LDEAYQWSLE QLRDIDAQQL QVAQQLYGP TTIREAMKKL NADERYLIRG
TDALQEWQK TADQAIADLD GVSFNIPEQA RQVECLIDPA GTGGIFYTPP SDDFSRPGRM
WWSVPKTQEV FHTWQELTTV FHEGVPGHHL QISQTLVEKD LNLWRRVACW NSGHGEGWAL
YAESLMKELG YHEDPGNLMG YLDAQRLRAA RVAIDIGIHL NKRNPCTGL WDASYARSFL
RENTSMNEDA LYFELNRYLG WPGQAASYAI GQRLWNLNRD EASQGGTTLA QFHSKALSYG
SIPMGILRDQ VLN

> aaRXA02300 (1-333, translated) 111 residues
MKTYAVLIAV AGLALAGCSS SAPGIWRATE PADAYLEIAD DGTLSGTDGC NRLFGGWEKD
GSTITFGAIG MTEMYCEGVN DWLSQMHTAT VDATMTIFN EAGSNIGELK R

> aaRXA02301 (1-717, translated) 239 residues
MDLALAQVDS TVSGLYDALD LIGVLLNGII GGTIARQRGY DIIGFLFLAL FSALGGGMIR
DMLIQQTVA AIDNQIYLAL AFSGALIAM VNFKGRVWEL FKVHGDAIVL GVWAVTGSVK
AMNAGVAPLP SIFMGVLTAV GGGMVRDVAT GQTPTIFGGG TLYAVPATLS ATSMVIFHSF

DQVILGMIIS PFLGIALAVT AYWCGWVIPV NTDFAPVNLT VSQIRAMLSK AERKDKDQK

> aaRXA02302 (1-765, translated) 255 residues
 VATNRTSSAG VITSVLASAL FGAIFFISGA IEAKAETLVA WRVLLTAACY LLALLHPAGR
 KVFKEFWDTL RSQPRQILYF IFLVVLITLQ LWLFSWSPKS HALDASLGYL LLPIFLVIVG
 RFFFADYITR LQWIAVGIAL IAVTLKFVIS AQLSWVTFAI AAGYALYFAL RKYSGLNNAF
 AYGAEVLALS PLAFFMLATV EDPLSNAMLS MVILAGLAGA LAMALYLAAS TLLSMPMFGL
 LSYGEPILLF VAALL

> aaRXA02303 (1-720, translated) 240 residues
 DDPDPADRYIA HLPDRTHHTA MIMLGSGLDH SMPGVAFIGG VSVDDVPEVG GAIFHPSNPT
 GRWAVSFHSG GWWRGSGDAL EFQWRPEVAA AAELSGTTIL DLDYPLAPGH NLHDMNEVVG
 KAVGYARHHN PVSITGWGYS SGAALAAINA SLFDALVLTF PDLGSVEKLP AEIRGDAVVP
 AAAAWPTTFV QIAAQDEIAE RPGEIGDATV KEYVSRHRIS TPKVAREKIT DVAEFLKTV

> aaRXA02304 (1-891, translated) 297 residues
 MKTPRLLKIL SAMVAVTGLL IPTVVPMAAA DAAELSDNVP DRTQIAIINP DGSVQESDNA
 EESRPALSLA KLYLGYYVLA QGAEEIDIELV PDMIRYSDDF TADYLESEYP EAIPEVIDAF
 DLEDTEWAGF WGNATTSADV IATFVAALID DPTAQPLLD A MSDTAEYAAD GYAQNFGTFT
 LSDVTGTFKG WSDSLDVHSS VSFGPGFVIA ANTYGDAETL TEDVQDSVSS LYPEEVTTAI
 EEQVDQLCEC AAETHLGMH TGAEKKAQLE GTIYGKTLSE LPNSAPAPAF IYNLLAH

> aaRXA02307 (1-390, translated) 130 residues
 MSGTAIMYDT TVVPSKKEIA QAWTGYVDLQ GSYRLVDTVD GEVGVEVLIS KDREGRLQI
 PFSYRSEIN PEQTLSTLEH GVLGRWVTN ALGDPVAVRE FIRTILTGDG GAARSDGVKG
 YLDIKGSGDA

> aaRXA02308 (1-429, translated) 143 residues
 MSETQNSVS AVMPAQLPPG PAERTVYSYG VRAGDQVHIL RMEAFDSDAN IVGERDIEAH
 AEQVFNKLAQ VIHEAGGTIN NIVSTTTILA DVTDAVVNA ARSRYFTGEV LPTHTVIGVA
 ALARPQFLVE ISAVAYLGDL SKD

> aaRXA02314 (1-441, translated) 147 residues
 MEWYQVRRRA RQLLIVLFIA AMLGAASMVI GPFLNDRITIE GNSGRALAQV TNVGSYRTTV
 DFQDENGIIH SPATGLLFPT GLGEGQRVWV NYAKSDPDV KVEGRKWTLIS IIPALSVAAY
 ATATWSVLWL GVGRFGRRSD DANETTV

> aaRXA02324 (1-1086, translated) 362 residues
 MATTPVTVL SGFLGSGKTT LLNQILHHRG SRKIAVIVND FSEINIDAAL IASEGHLTRG
 EDRFVELTNG CICCTLRDL VDSVGELASS DRFDHIVIES TGISEPMPVA ATFEWQWDDG
 TRLADKAPID TMVTLVDATQ FIDLIRKNTS LTEADMGATE DDERTIADLL TDQIEFADRI
 YITKSDLVDR TVLEQTRALI ASMSPRARID LLIDGLNDGS PITDDILGAF LYDEATARAY
 EGYTELENP HTPETEYGI SSVVFRSDRP FNKDRLLQVL RSTGLVRSK GYCWIADHLN
 IVQVWHQAGP NLSIRPAAYW ANSEITPGTE LVLIGIHIDG PTLALLQGA TLTDAEVAAL
 VL

> aaRXA02325 (1-870, translated) 290 residues
 MMDHAHSCS PTLRRDLEVT GQLQPEKAVD LAAPHEGKVA NITKVTSSNM EHTITQASKA
 KEVVVLIGHS LLPTFQDLEK DILHFQAGNK GRFSVAIVDP DRSADVVARF RPKQIPVAYV
 VKDGASIAEF NSLNKEPVAQ WLDHFVSRET IPNEKEGDVD KQIDPRLWRA AELVNAGDFR
 AALALYEQLP QDATVKRAHA AVSVLARMSV ADRGEDPIEK SRRDPDDVVK ALAAADMYVL
 MNQPDALAH LAALLPKPEA ARRIVELLNL FDPLDLVALE IRAQVGNAMS

> aaRXA02331 (1-366, translated) 122 residues
 MELNGGRFYA RKLTSNDRID DVPALSLILA DAAQFIADAT TAWHEDTEYT WAICEQTSVE
 LLALARLDPK QRTLEVVPAG DPATQLPNDF VLAPKTIGDA VAEGRDTITR WAQGYLEISL
 TD

> aaRXA02336 (1-180, translated) 60 residues
 MKDTTEINWQ GYADGTAIRE AVIHSIEREV SAGEQPTPND LKFLGLFQHR AGYVGSLLTG

> aaRXA02337 (1-924, translated) 308 residues
 MSKLYAGARI NALRRTHQLT QSALADKLDL STSYLNQLEN DGRPLTATVL LQLMKVFDVE
 ASYFSPDRGT ATATRLAETL AMNQPTMSM DDLLDFADRF PQLAQHIIQP AEVDPTHSSA
 HDFVRDYFAT HKNYIDSLDR LGEELATAIG QPGLRVTRLA QLDAEYNIT VRFRAPDITG
 RRHFDQPQRQ ILLRQDLSEA QQCFQLAEEL TFLAHAELLD TLTDQPDLP SEAAIRLAKV
 GLSQYFAAAV VMPYTRFLEF AQDKHYDIEL ISEAFGVSEF SACHRLSTLQ RSGASGVPPF
 FVRSDRAG

> aaRXA02338 (1-480, translated) 160 residues
 MKKSIVVFEV EGGSDKHFDG HRKDTMPIVN SINDAGWQAE VVYRPEWTE GLFEYVSENF
 DGYISRVNPG NIPGGERGYF DLLTRLSEAG LVGMSTPEEM MAYGAKDALV KLSQTDLVPS
 DTEAYYDVET FHKVFPTSL SFGARAQAKT WLHRLPHLAR

> aaRXA02339 (1-492, translated) 164 residues
 PTDNLFSYPA QRYDLLTLAF EVRIGDMVQI NDMLAPPPVK LPEDPALGAD PTLTSTAIAH
 PDSPLVWAYR AENLIKASAN DEEKIQAYAF ARTGYHRS LDRLRANGWKGW GPVPFSHEPN
 QGVLRAIASL ALAAKLIGED NEYDRCRQML SDADPESVAV LLDK

> aaRXA02340 (1-639, translated) 213 residues
 ERVLKQNRGS TGSGIWRVQL VDKELAASIE PGTALPLDTE IKCTEAVDNH TEVRKLGEFM
 DFCDQYIIGD NGMLVDMRFM PRIVEGEIRI LLVGPHPVFV VHKKPAEGGD NFSATLFSGA
 KYTYDKPEQW QELIDLFA DA RPVIAEKLGG DNIPLIWTAD FMLGDVVDGK DTYVLGEINC
 SCVGFTSELD MGIQQLVASE AIKRIEEFAQ LTV

> aaRXA02341 (1-411, translated) 137 residues
 MGNSLEKHIA EGDRIHVDLT SPLSAMLFP I FELIVITGIC WMGIGFLDQL PGIDGTNPAD
 SFPEGTRNL VGVWAVLAAW RFGLPLIRQR RLRVILSDRK LLVRRAGLRT GFDSIPLSYI
 QRVQRRRNTL VLGVGGH

> aaRXA02347 (1-321, translated) 107 residues
 MDELGVGWCQ CEKDSITGKA PHPVNKPLVT KSIIRALGDV PDVMSNQDIS LVVVDLWKFD
 TITPPIAESL MRSVKAVNGE MHPQYPTATA MAAIKHFSNT FDGQINA

> aaRXA02349 (1-390, translated) 130 residues
 MSTAYFIAHG NDTYRPTSHS SGAWRDDELH LAPVAGLVIH HMERWRREVV GDALVFSRFS
 LEVLGQIARD DVTLRTEIVR PGRTIELIET VAEINGRVTI RARAWLLKTS DLAHISGDTF
 EALPSMTELA

> aaRXA02352 (1-555, translated) 185 residues
 IYNTSSTLNG FIADKDNSLQ WLFDVPGSDG ASDFGNFLS KAGTIVMGST TYEWLLKDLD
 FISDPHKWTD VYGDRTWVF SSRNLETPEG KPVKVNGDV ADVLPAILEE SPENTDIWIV
 GGGDLAQFF DAGALDRIIL TMAPVFLDEG QPAMPRIES NRLRTVNVRE VGQFTEITLE
 TIKGA

> aaRXA02356 (1-996, translated) 332 residues
 MATVTFDKVT IRYPGAERAT VHELDLDIAD GEFLVLVGPS GCGKSTTLRA LAGLEGVESG
 VIKIDGKDV GQEPADRDIA MVFQNYALYP HMTVAKNMGF ALKLAKLPQA QIDAKVNEAA
 EILGLTEFLD RPKDLSGGQ RQRVAMGRAL VRDPKVFLMD EPLSNLDAKL RVQTRAEVAA
 LQRRLGTTTV YVTHDQVEAM TMGDRVAVLK DGLLQVAPP RELYDAPVNE FVAGFIGSPS
 MNLFPAHGK MGVRPEKMLV NETPEGFTSI DAVVDIVEEL GSESYVYATW EGHRLVARWV
 EGPVPAPGTP VTFSYDAAQA HHFDLESGER IA

> aaRXA02358 (1-291, translated) 97 residues
 MVSYSVHGAL DIDGSLKKLT LDFLNKLATN PASPGLHIEP IKNSIDSRVR TGRVNDQFRA
 VLFELHDEFD HHFVVGGFIP MMMPSRQEK SALKSTL

> aaRXA02360 (1-2433, translated) 811 residues
 MRGDVQKITK VYDGKHRTLE IPVYQRNYDW TEKQCSRLFD DLSEVVKENH RQHFFGAVVG
 KPQGSWTWV IDGQQRLLTI SLFMLALVHS LRASEVEEGE FNAGYNIDLA TLIEDDYLR
 GNEGNLKFEL KPVKNDNEAY QKLFGPESEF IESSNLTANY RYFRNVLKAT DLTAQWLWEA
 IEKLRVMYLD LEEFDDPQRI FESLNSTGLE LSEADKVRNL VLMDQELKTQ EKLYEQRWNP

IEVCVKFDTD NFIRWYLTLLK TARTPRKQDV YEEFKKFIRN SKLPVEFILD DMYEYAKLYR
 DLLGATTGFI AADRCLKRFV PVMGDVVLFP LLPVLKDAKD GIITESDFLG VLKVLESYLF
 RRFVAVGVASN ALSKIFSTAY SDIKKFWTPG QSYSSLLAYI LKRRDGSGRF PSDSEFRENF
 ATKFNWNIHN ENRRYLFDCLE ENADSNDVRD IQTSLDEGSL SIEHIMPRSL NDQWRAELGP
 EYARIHETWI NRIGNLTITG YNSAYSNSSY ERKRTMENGF LVSPYRINNF IKKQKHWSSEE
 QLIERTELLT QAALDYWPLP KETFQPPQAV LPTESLSDSL SFRGREIVAF EYEDYKETVT
 SWADMLQSVL KVLNQSFQRE LIALTNEEIC LATSNNNSNS LREIDHGLFV DTGSSTSVKI
 GFLRRVFTQL GLEQEALVFT LRPLANDVEP RDDELEVEVE KKYSDLTKEI PQLEEAENLE
 GADTEVIPLEL SKLKEQLTAF SPENPQAALG GLPVPEFLKQ NVIEQLSAEH ILAVLTQHFN
 IASMMGDDYL LEELRSGRLR ELLQRLEELD S

> aaRXA02361 (1-651, translated) 217 residues

MELLSHLLAL DPASPRLTVY NESTGARLDF SAILTDNWS KVGNMILLEEL DLEEGSLITI
 DLPVSWQAAM IMLGALATSV EVSFDDPEAD AIFTSLDRFS HYKGHSDVLI VSEDPFGRGV
 VEGGGELPNG AIDFGPTVRF YGDQFFQPTR TLPEIIQHS VPVGARVLAT GWSDIESFNH
 QVLEPLAVGG SAVIVTGLAD IERLNQIATN EKTTHRI

> aaRXA02362 (1-3699, translated) 1233 residues

VTISRRLKQE RSFADDLQDL KTLNDQLRFT NAKLQARISG IGNDGKKITR PTPLLALDFQ
 LTVEEYETII AILVEAVGGN QSKPAILKDL FIEYPLVFLA ALSGTAMLD A QEGFWPAFWK
 RTQVSVEPHV YDAIRKELVN SIRKNGLETF SLADLNRREY VGLIQLHSGL SAKDMLALVK
 FIDHTRAENQ GWDSDGEDFAS YAKSVFSSGD NLLTTESLKQ LVTHIPARSV DFIARVYELT
 NWYRDLKDLN EVEAFVGTG LPELSFKFLL ECLSGEAEQI AEKTKAAPAS LENLEPPHLY
 LDPQSFEELS VFPAISKTA LQIPAPEWTV IYDGNISIKVR PEQDWSYGGF AEYRLPLDKP
 LSSLRVITPT EKSLILIEGF GHKNPIMFFK NNGQPYANQE MLSGNAVTAI VPAAAIIRAR
 MRASKTFNYQ DLGPLSGWNK WVIRSIPLKR AESITVSHGG FRKELPVRRK VDVQWITEDL
 TIENLQGLDH EPVFHTSPRI EFPTSGSNWV IQYSQILPDG SLIEMEDYPV EPNFGYELD
 LFEESDDPWV GQFLVTLLKD EKVYETRKFN LAEGLDLSLT FSGGGPENRF RYPSINQGQT
 GLTKTFARFS SNSEKHIFRP DEIIGLDAFT SQKAFNIASG DFPEDYNLDV FITPPQLHYQ
 VPVTHSQTKW ESTKTTLDEN DFADGNLQIR FPNEVYDPNL KIIKMVAYKK PESSEPKYLS
 KIGSSKVWSI PMDRIKELMD DDAQFLIAE WFAESKDQHR EKIISEAKRT GKISNAALKS
 ARPQPQASSH IATIEKKPLL AAAEIKLSTV EELGRHTSK RLEGWAWASAL NPLDPPIKVD
 FQGTSGSLPD THFVVGPLIV EVREKEFLSQ WQPKVPSVKA VVANDPSFEL DPQFDPFLTH
 RWMFAPRSGK VLLPQEIRTV WDARFNMRHV LAQRENHVK SIQDFDDATS TYLTSDPRVA
 LDELDKSSIP SNSHFESFIR SGLAELSFEV DDTAGDIHRV PWIGLIQEMN DLRIQLIQGY
 ETEERAIERR NSQSYIREIG GSELWNILKG NSEGLSLAQK CAPQATEINV IRNSGLEAMR
 NGLGADQFSA EFISADSRLR AQLEWLENRR ELNDLGQLPT LFDFAEKY EY LIDHLGDDRI
 KVTARELSTL ASEHRRGNAE NWLYAPYVSF IYSLNRMIA HEVIRPIAQI NYSRHDWANA
 ARLIPRLTGF DLVSAEAKVL SAINNNNIIP TAI

> aaRXA02367 (1-609, translated) 203 residues

MSNAEINPVE YEINNHPAGT ALNPQCEDGA NVEIITSREV PLGGPRAMTV HRTLPRQRQS
 LIGAWCFVDH YGPDDVSLTG GMDMASHPHT GLQTVTWLFE GEVTHHDSGG NHAVVLPGEV
 NLMTAGAGIC HTEVSATSTT ILHGLQLWTV LPDKDREGPR RFDHYAPEEI TLEGGSARVF
 LGSFLGQTSP VHTFTGSSCF RVH

> aaRXA02368 (1-675, translated) 225 residues

MIVLAGATRV TYEVEPWLA PLFILAFASI LIPFPISKTK GLRDIDAWKI HTTPGDKKRA
 IRQLIIPATA LAIDIIGLPT LFNAPPLASA ALFGGVYGAS LAWAAYRADQ LPRIIRTKERL
 AELSQNASLD DVRSDDLVDL EQPESRELVR CLLAHGAMDG TRVMARQVAR VLDTEVDEVH
 QVARSLQHG LVSRSTIMPG GDPGKVFIIEV SLKGISAICA LESGR

> aaRXA02374 (1-621, translated) 207 residues

MSYDFVLFT DGDPGSARIS KTPLTERIDF ATPSTTPVLE SLSAGLAETV PDTVKLEEDA
 IHLSGDRCLY VVTNYSAAE AAEWLTAIAF DYGLGLADMN ADTILLFGDE DSDAVVQIDD
 WFSPAFA SAY LPHLLVEVMR LKDSKTPYLR VTLAADD SKF IQTLYETDNK QWLVTSSST
 GTDETHVKTI NDVLERIETW FNQETAV

> aaRXA02381 (1-1023, translated) 341 residues

MSVTNFRRL AGIAVIAACV AATPTAQAS SCSSGSSGSS AGSSGLWDL FFPESHESFIE
 RLLDPLDDSH ISIHPDLTPD LYEEVFDPPO IGECPAVVAV VARGSEQNLQ IRPARYSEES

PWTSNGFEEK NFRSFFGRME KHYRESTGES LMKDVYVMGL NNIEYPASLP LSSEGSSAIE
 LGTSISSGRD NVISAIDRFE SATGCTPKYL LAGYSQGVLI VDGYYEELIA RDQYLGTLHI
 ANPAQQVDDP TLVGHEVTTG GLASSVEPVE DNPFKVSYCL PGDIVCDRSF EQFSAAGSSI
 AAAQLSTGNI RPRGRVHVQYF VTTQPWDEQI FDEVASWIEA A

> aaRXA02383 (1-603, translated) 201 residues

MPVRVIVDSS ACLPTHVAED LDITVINLHV MNNGEERSTS GLSSLELAAS YARQLERGGD
 DGVLALHISK-ELSSSTWSAAV-TAAAVFDDDS-VRVVDTSLLG-MAVGAAAMAA-ARMAKDGASL-
 QECYDIAVDT LKRSETWIYL HRIDEIWKSG RISTATAMVS TALATRPIMR FNGGRMEIAA
 KTRTQSKAFA KLVELAQIRA D

> aaRXA02387 (1-678, translated) 226 residues

VWWCLPTWIK AGQDAVDLAL SAAVDPSPGT YLIVMHSGGG RSKSMVKKLE KVAVVHDAAK
 LKDRDRPGWV KQEFKNHKVQ VTPDVIHALL EGVGSDLREL ASAVSQLVED TQGNVTVEKV
 RAYYVGVAEV SGFDIADSAC AGQMSKAVAS TRRALQLGTS PVALAAALSM KVGQIARLYS
 TRGRINGFEL AKELGMPPFV VEKTAKVARN WSGDAVSEAV ILMADL

> aaRXA02390 (1-669, translated) 223 residues

VEWTAFTGLI LLNLVGSLSLSP GPDTFFLLRL ATRSRHAHIA GVAGIVTGLT VVWTLTVVGA
 AALLTTYPSI LGIIQLVGGT YLSFIGYKLL RSASRELIDA RQFRFNADAR PIPDAVEALG
 TRTQVYRQGL ATNLSNPKVV MYFAAILAPL MPAHPSPVLA FSIIVAILVQ TFFTFSAVCL
 IVSTERVRKA MLRAGPWFDL LAGVVFLVVG VTLLEYGLTG LLG

> aaRXA02393 (1-282, translated) 94 residues

MAESLVIINI DEKSAKLLID AARHHIPTRE TGNARPLSV IPIEDPRSRP TLHPDHGWMW
 PLSPPVVDEL LGGGLKIGET ELESTNIAFI VDAS

> aaRXA02395 (1-732, translated) 244 residues

LITMAIPFSI LILAFTIFGG TAITMNRENV DGFDSGSSKE QVLFDMFSNL PLYSITPFIL
 IFVLAVFFVT SADSASVVMG TMSSQGNPAP NKLIVVFWGL CMMGIAVVML LTGGESALTG
 LQNLTLILIAI PFALVLIVMA IAFIKDLSTD PAAIRQRYAK AAISNAVVRG LEEHGDDFEL
 SIEPAEEGRG AGATFDSTAD HITDWYQRTD EEGNDVDYDF TTGKWADGWT PESTEEGEVD
 AKKD

> aaRXA02396 (1-279, translated) 93 residues

MATTASKIST IRPAQQDALW SVREDLHARE DGLVDPVQVD AILDHVASNR EAKITVFSKI
 FIAREATAAL QQIAGNVNAD LLDLIALNRG MAA

> aaRXA02398 (1-1530, translated) 510 residues

VVEVKKRNL VAPLTASLVF CNLAVAANAV EVEAESPVVI NEVESNSDPV GDWVELANTD
 NNSSIDISGW SLVDDKEDLE NALVLPEGTE IESGGYFVIY TDSADYVPTN NTFGGQEYFG
 LGKDDTVTLR NAEGEVVATY SWKDLGEHAE NTYGRIPDMT GDFANTGVPT PGAKNVAAEG
 SGEEEGVVAN AQLPFHNVEI TPIHLGGDFT GEDMSGVDFD ANSTAWIANN DIGKIYSLAH
 DIANNITYKLT GEWETGYPEG GGEPDAEGIV AATNGDIYLS TERNNADKNV SRPSILRFAT
 PTGKTGVQNA VQEWDLSEFV GDIQPNNGLE AIAQLEDNIF VVGVEETGDV IVVDLSADQP
 VLVQRYESSF DGVMSLDYNA ATKQLSVVCD EACDGLSEIL EWDGEKLYKS DDKIYERPAN
 LGNWANEGFG TYTSELKCEN GNTVSVTSYL WADDAATNEG TSLNSAQVIN GDCGDVNIPG
 ESSSDNSSSD FATGSIAGAF ATAVLAVVGI

> aaRXA02403 (1-765, translated) 255 residues

MTTFITSGGL EISPAGAHIV HAESPEGELL FVSSASQYGE GNAIRGGVPI IAPWFGGLLG
 LDPAHGWAKR SAWDVTEHDG QIHAEYGRDG LLLDIRANST KNGFEITLRA YNDTDEARTV
 QLAFHPYFKV DDVEKIEVRG LDGVDILNRL NNEVETQDGP VTFDGEFDRI ALGTPVVRIF
 DTDRIITIEG DGHSTVWVN PGESRASTVA DIGEGEWRDF VCVEPALLGA DQKGVVRVAPG
 QSVTVGMQVS VEKRA

> aaRXA02406 (1-549, translated) 183 residues

METLAAQART LLEKGVVAPT HASFVESIAK AIPILSILLT LIVTVNGISS GNPVQPPALE
 QVRTDVVNKI NYERNLKLGV SISPELELHT AAQTIAQRNA DSDSEKVPD PEGTLVLVQQ
 NLPYANANAD TIVDRFLNSP DHVKLLLAND YEAIGVGVAY KGDHAWIVVE FTVAPADSV
 E

> aaRXA02407 (1-306, translated) 102 residues
MNRQNQLHYP QEVKAVESVE SSLNMSSPSA PLATPDVELD VHTLSSSENLP WLCIVWDDPV
NLMSYVTVYF QTVLGFSKKR ATELMMQVHT EGKAVVSSGE KD

> aaRXA02408 (1-828, translated) 276 residues
MLIDVAGFLL GHVTKGDTGC SVVIAPNGAF AGVDVRGGGP GTRETDLLEP HNSVQQAHAH
VLCGGSAFGL AAADGVMTAL ENRGIGFPVR PEGPIVPIVP GAVIFDLLVG DPKNRP TAAD
GEQAVENAFH GTHNGSGSVG AGTGATAGRL RGGFGQSSRR VGKYTIAAGV VANPVGEVVD
LTTGALFGRP EVMGVGVDKL KSAAETLNTT IGVVATDAPV TKAQAKRLAL VAHDGLARAV
RPSHSPMDGD TFFAMSSGDG SGVTPVELGE LSAHAA

> aaRXA02409 (1-414, translated) 138 residues
RAQSVPKDPL AEMTGMTSGH KEAPTDPALA RLLPDFQHEG DEEYDGDNSF LRSLEHGDIT
RAKLENLRVI NDALGPDGNV AVTASEEEAH AWLAALNDR LYVASGDVRG GEAAEEDREN
LVQWLAYNQE SLLEAMMN

> aaRXA02412 (1-480, translated) 160 residues
VAIIIVIAFVL LFNSLVAPNN SSSPVASPT SESVEQTISE SPESPSATED QPPSSATETP
RNRPAQPSLP AGASPANDAA ATQTDAGNLN NVYTGSASTS AGFAQAVRDA FVNHYLDTNE
LSGRVTATSP VTGGNYTMNC EDNGEYVCTT GGNNAVYIIS

> aaRXA02417 (1-2124, translated) 708 residues
MDMNSSDRLA LRTALEKLSA SATAMASASN DIKDLVARLD AQEMSLIDAN PAPTPAPTAP
PEAQLEPQPL YATASTAPA LADVSGTNRI PRFVRHRALD PASEGWPLGV EKQKVQAPAY
PHPVRPARPA KPPMTSEEKI MRGVAIGGV ITVAGVILLV SVAIQRGWL PLGRVIGAYL
LAVLLLGAH YVRKRGRTRVE ALVALTVTSQ IAFLLATSAI IFILEWWPPG LGSLVALIGN
IGFLIVGRWL SLSKTEKSAA EGHTVFGAI AVSGFSAILF ALSADAWWPI FSIVAALLLS
YRISTNIIRA SMAAFVILQ FVLSASWQTM EWPATIVGTI TAVLLVALTL WDPFKITATD
SHDIALEEYV RSFETNPVST WVGAVSPVLI VFITTSMFIA VDWPWLALIP ACABAALGIF
ALRSSDTASI ENQRMSRLIA VVGLALIAET FVQLFYGDLP TNPLLMVFL IAGAALFMWL
RMLPPQRQLG VVPVWAWLIA AVAMTGVLLR NVVSISPLWL TDTQALIQAL LILVFIAATI
QVRRSFYGHK LWLQILVGLT LLTSLAISIV TITTFIGRLI AGNAGMMLGF LIGHATVSIL
WMVIAAALML NRKLLDAPGA LWTGVGLAVA GTFKLVFFDL VALSGVPRAI AFLLSGIALL
TIAAMRGRRT SENKADVARP QVARHGATSH KNEEPSHESP SSSPTTTL

> aaRXA02421 (1-810, translated) 270 residues
MTLLLKPILQ AAGINPEDAL AMRHVFISIH EDTNSNGITR ESKDEEILAY TASQSSDPRR
FPLNPPRFWM VFIREGGSQA RLWKVVENHG EVTNDGVRRV FNLTEIELMD DLAGRLVIRW
NSPRKWWIKG TTAALYTVDT IADAEPIPPF GFDNLVLSYP FLQEVMPREPA YASWRTALGA
VKGIYLLTDT RTGRHYVGKA EGTENIRQRW NSYATNGHGG NVKLKQLKPD TFRFSLLRVF
DPATPTSIIIN AAESHFKIAL DTIKHGLNAN

> aaRXA02423 (1-216, translated) 72 residues
MIRKLARPML ASVYVADGAE TVLNTSAHVE GTQVVLDRIR YVLPRKYAKR ISRDPELVTR
VIGGTKVCAG SC

> aaRXA02425 (1-630, translated) 210 residues
PGAFDELTSV WGEKGGSWAA VIGFFGGIAL IAIIDRLVPT AINPHEPSTV GGAVEGFERR
NRMMKMGVLT ALAIAIHNF EGFATFLAGL SDPMIAIPVA VAIIAHNIPE GIAVPVPLRE
ATGSRRKALG WATLSGLAEP AGALIGFLLL MPFIGPEALG LCFAAVAGVM VFISVDELLP
TAISSGKHHT AIYGLIAGMA VMAISLLFI

> aaRXA02427 (1-387, translated) 129 residues
VDFELGKRCP CGTGLTYGEC CYRFHSGEWW APTAEALMRS RFTAFVGNQ QYLLDTWDPE
TRPSELGLDM GIDFYRLDIL ETTGGGPFDS TGTVKFQAFY KGLASGVQEE DSTFRKVNGA
WVYSTGDVD

> aaRXA02428 (1-1134, translated) 378 residues
MAATLDLPDT DPIAYAMFAH CFTGSRFTPA AARVSKTLAE SGVACLRFDF PGLSQSEGDF
SKTTFNSNVD DIVAASQWLT EHYSAPQLLI GHSLLGGAASL KAATKISCLK AVATIGAPFD

PAHAVLHFAD RICDVEDDQGA VTLQLGGRDV TISREFLEDL AEVNPEDHLR RLRKPLLLH
 SPTDQTVGVD NAQLIFRVTR YPKSLMTLDK ADHLLTKDGT AQRAARIAN WVEPYLVPEN
 VCEDLPEFVA EASTIKASKY GAAIRTGGHN FITDRDKSQG GKNLGFTPTS LLVSALAAAN
 SQTIKQAAID NRIKGLDDVK VTISQEQSAD HGQIKLRRKI SLIGNLSAD SASLRAASNS
 CSITQLLAQG IVIDDEVN

> aaRXA02430 (1-186, translated) 62 residues

MSPVSRRAE FRINEGEFEV VDVGSLNGTY VNREPRNAQV MQTGDEIQIG KERLVFLAGP
 AE

> aaRXA02433 (1-600, translated) 200 residues

VKLKATAVT FTVAALALS ACSSDDSSS ESSTSSSTSS AASDAATQYP TAEELNAILA
 VATDPEAPIE EKVKTQVQSE NAPELFETMT QAKVESGAEF QVVGSVLPY DPTSEVLTV
 MFQLPDRAEQ EAEGVEFVNT DGNWQLSQDW ACILITNTVA PEQVPAMCVG TDASSAGIEE
 APAEEGAVVE EAPVEEVPVQ

> aaRXA02437 (1-810, translated) 270 residues

MSTIGNLKLVDGARKAYGT YADYDRKVS ETYDALSQA GEYAPKAEQA VETARESAKE
 FYTESRDKAG NVTKAARARL EKALAEADKQ GTSALKDARE SGKKLNKAR RKADKAAKAA
 RKATEKKESH WVRNLSLAL ATSGIVAVAY AFLNKTCKET PGTQPPRVEV QLKKAVEQDE
 PEVVAEAAVE EPELVYSTES PETTEAPAEA TETPAETTEE EAKTEAELEA ELEAEADAEQ
 EAAEEAEAEA IQAEFDKKNA PQRTQSEKKK

> aaRXA02443 (1-954, translated) 318 residues

VILKDIFNNG ELFGASSAKN FRKLLAVPAV AASLAFGITA CSAVDDTPDI VVTNINLGDV
 VSHIVGDSAD VQVLMKPNAD PHSFGVSAQD AAAMEHADLI VANGLGLEEG LQSNVDNAKS
 QGVPVLEVGE HIDVIDYSPG VPDPHFWTDP ARMIAATEVI EAELIKELDP SLTESITQSA
 QHYREELVAL DEEVTELLSG VAPENRKLVT NHNVFGYLA RFNYTVIDTI IPGGSTLAAP
 SASDLNDIST AIEDNNVPAI FTDTSPPQL AEVLASNAGI DVQVVSIFTE SLTDADGEAP
 TYISMQKINA ERIASTLS

> aaRXA02444 (1-1278, translated) 426 residues

MKNSKLLIA AVSTASILLA SCGTDSADT ATASSSATAS SEAHDDHGHE AEGSSSTAVEV
 SSPQARIVTT YDGGIITLDA NTLEILEDTE LAGFNRLNSA GDGRHVVFST GGGFQLFDTG
 AWTEPHGDHT HSYTATPELT DITYSTDKPG HVVNHAGKTV LFGDGDGKIQ IFDTASLLKG
 DEVEPEIKNA LKAHGVAVV LENGDLHLTL GDEDSRNGAV VFNAAGEEIA RNEQCPGVHG
 ESAALGDAIA VGCEDGVLIY KDGEFTKVQA PDSYGRIGNQ SGSDVSPVVL GDYKVDKAD
 LERPERVSLT NTETGELTLV DLGTSYSFRS LGRGPAGEAV VLGTGALHI IDANTGAIN
 TYPVIDAWTE PEVWQEARPT LFINKDRAYV SDPSNNELHV VDLANGNILA SATLPGTPNE
 LTGVSG

> aaRXA02452 (1-180, translated) 60 residues

MTPAGPAQLL IVALVVIVLF GSNKLPDVAR SVGRSMRIFK SEIKEMNKDQ IESSDQTLKN

> aaRXA02454 (1-813, translated) 271 residues

MHLLNFYWDG VLSNLTFRR DAETYSAYLV DAETGEFQPN LSESRRLYDV DIARVNIIGE
 LMDLQAGECL DKSIDVIALG GLVESSYLEL WTELTAESV DASEYWRLE RIDRLNQLGF
 DVGELKVTKD DSRQVVRIRP VVVDPGHYRA ELLSLTGLSV EEHQARLLG SIQAYQAVEC
 GPHVGLTQAA HLWMTNEYEP TIAAVPVEML DKLEPAQIFH EIVDHRWFLA QERGGAVTLP
 EATASYLESV LPARRDEARL LSTNPSDEDL S

> aaRXA02457 (1-1110, translated) 370 residues

MFYFTVNPNQ DPLSTEIVET NRRDLAFWHR LRPKDDDDLA TAINKICVRT GLSRKLIAC
 LFSICFLPYL PNFHKLVEKL GHLDMARINA ITKAGEKVPS EKRELFDAYL VDYLTPRAEA
 QCLPQASSIS AMMRKFIAQH CPDDKASSAT NDGSIRYRRN NKGGISITVD ATASEVTEIK
 AALEQMSKDK DCTPGTSLH IIRGLPTKV LNTYGTKDSP EYLEGGTWLS KEQSEFWKTR
 TTSSRDMDAA HFSYTTAYAP TREMRVYIKG LRTTCSVPGC SVAVENCQLD HIIPWEGEGP
 TTPWNIHPLC VFHHIQKTEG RLQCYPLPDG TVLFLVDGIP VFSIPDGPLS KSNKTWGTFK
 GKYMERRIAA

> aaRXA02459 (1-735, translated) 245 residues

LARRSYDESD VVRVPGKGTR PRTKDRPSHE NALVGMVVTK DRGRWGVVLD GRQDAIVTMR
ARELGRTAIE VGDRVGVVGD TSGRPGSLAR IVRLEERTSV LRRTADDDTD FERIVVANAD
QLLIVSAVAD PPPRAGFVER ALIAAFVGNL QPVLCLTKSD LADPAEFAAE FEALEVPVVV
CGVDDPLDPV LEVVEGHITA LIGQSGVGKS TLVNRLVPEC RSLNWCRVGG WQGSAYVDAV
GRSCH

> aaRXA02460 (1-504, translated) 168 residues

~~LRVYIPATFS~~ ~~TLRGLNESRV~~ ~~ITARSGYGFA~~ ~~VTPALLDFYT~~ ~~DGDEEEIAHA~~ ~~AFQDAAEASI~~
RLLAIGDEET FPYRRVVSV DVDDSVVTYQ PENGESVVKL SPAHINLDDV AAIHIDVEAS
EADTKKAIEV IDESDLGEED AELTVGDAQD NFWAWYDPEE LPFLVELL

> aaRXA02461 (1-408, translated) 136 residues

MRGLIVDYAG VLDGTDEDQR RWRNLLAAAK KNGVGTVILS NDPGGLGAAP IRELETNGVV
DKVLLSGELG VEKPEEAAFQ AAADAIDLPM RDCVLVDDSI LNVRGAVEAG LVGVYYQQFD
RAVVEIVGLF GLEGEF

> aaRXA02464 (1-507, translated) 169 residues

MGTTTPDDSRP PEITQDIEIT DGRIVAIGQS VAAVYTNDPS PRIVSYNDDG ELVGEQAVDE
VEFPDPPFQS ATADLPHHMS WFNGDSLVLV SPTQLNVRQS FNDALGTGIA LNSLLYPTA
EGITVANWDT GEVQRTIPVD RAGYDGEVAL GVVGVVIVEK RGSEIVALG

> aaRXA02465 (1-399, translated) 133 residues

MPASIRWGGI VALIQSTIGF GYAFFLIYRE ATGETDPSIV YETDNANTWV GYGTAFFII
VFGTVVAGAI NMMKGHRWGR GAVVMLNIIL LPAAYMFIE GRFSWAIVTG ISALFVLGAL
FNKRAVLWAN NEI

> aaRXA02466 (1-87, translated) 29 residues

VGEGQEQTFT YVIEIEDGVN TAAYGGDDA

> aaRXA02467 (1-225, translated) 75 residues

MDIKIGFADT ARELVISSAL QQDEAAAKVS EALANDSGVL DLSDEKGRRY IIRNSRIAYV
EVGTSAPRTV GFAGA

> aaRXA02472 (1-291, translated) 97 residues

MSFVNITALT FPAGAEKEIE QRFAARKKAV DTAKGFQEFE LLRPQFGEDR YFVVTRWDSR
EDYQAWSAR PAGNHADDEQ RGMSVEVLGF DVVPLEG

> aaRXA02473 (1-741, translated) 247 residues

MVAEYPDGSS EIFPVTLNLI PEDTLVYDAV YKFKSIRTGS EDQITPFVSN QPDVPFPAGT
SFTLTGYEIE DQLRSAGWKF ELNPVTGELS VTPVISVIYP DGSRDNTIAT MESVGPDDSE
LFKPDFFLIP IKSGDYIEIG VLAPGLPAGT EFHLDYYALP DRFFDLGGST SLSGNGKFSL
GVPLTWNDL QLPISITFPD GSHTVENLHV DVTPANFAGN PIDEPKDDDK DHPQPAPKPS
GSSFGSS

> aaRXA02475 (1-1155, translated) 385 residues

MLGLSRRKFA MLAALTAGIV GVVATGCSTP AEPETIDNPV FIGISIDPIK NLSPNHAANL
FALSADGSGG IFQELAPTYF PSIHRLGNF IAPDRDSLIV VDASLKEVYR HEVARLGVM
QTQSARSPLH KSVAFSNEG TAEAPYRHRI VSATEKTSAS AMTDQRHFAL TACDDGSTRW
VEYSPDRGME DPMGPGSARI VTLQADGELS EIDVEWNFPD RPSAPIILSC EDPSAYIVSE
EDIIYVKDEV SPAESIGKLP AYEIPDRARF DTVSGEDYFA FTSTGMLTRI NIPQAKIVYA
QSIDLYGKHP VSITFDSRA YVVTSGDSGE SLLEIDLNDP TCTSDQLSLT GFNKLLTARK
PKPEPSIIIE TILPIDPNYS LGCKS

> aaRXA02478 (1-1236, translated) 412 residues

MRTSLIARGL YRIPALVWDQ GLLTLFDARL SVDDLPAID VVSARSSDGI TWTTEPAIV
ETEHARGVDV CLVTGDLCHF GLSNLAGFFE DPTDLEPRLA RRDVSGWTSI SMAHYFADVD
AAFASSGTGL VLADGRWISQ FVVRRGREIS LRILRSDGHI TDIAGGNESA MTQLPSGRIV
LHSRGVGHRL SSVSDDFGET FTPLEPVPEL IDPGCNGHVF YWKAAGMLAA THLADPDLRR
HLVVDLSSDE GATWAHRITI EREEAAYSTA AEMPNGDVAV VWEAEGTRAI KCTVISVNDI
SLRIDEPISD AISLRHVVIN DDHDGIEVAL PDASQWGEV FKIVSNPDAS TQKIRTRGKP
ARQTLIEIGDE LVFDIRKGGE VAYGVTVPYD GRSLGKLNRI LEWGCRGRFA VL

> aaRXA02482 (1-810, translated) 270 residues
 VGVAKSKKSA LPKVLLTIVV ILLLLVLVAE FGLRFMIGKQ LKDEFQAQAS SQGISATEEP
 SISFGASPLL LGIARGSINE VTIDTPDSVS ITNQDGVPSI SGTPESTIQL QGLDIGDRDN
 PVADHLTLTT LATDDFILAT IQQMAEATG GNSTSQGFAE QLIQELIKVT DITSDAANQT
 IEVEFTDGAA RASLHPIVTN GQLGFEIVDS QLFGFGLPDE ISQMLTDALQ SSINEVAGGL
 QIQSLEVDA GINVTLTGDN INIQTLEAAQ

> aaRXA02483 (1-813, translated) 271 residues
 MADHAHLRA SFRKGANGKQ KPIGVITRGT TGVNRLRRFD RWCFFHHPKIR SLLDATSLAL
 DVGYGASHTT TVEWGRWLHR LQPDMDVIGL EINPERVLEP QNGVSFELGG FELAGYTPQL
 VRAFNVLRQY DVDQVEAAWE TVTSRLAPGG LFFEGTCDEI GKRCTWITLN SDGPQELTLA
 WDPWGISTPS DVAERLPKML IHRNIPGEKI HALLAAADLA WDYCAGWEPH GPRVRWEKAR
 EMLIDQGWPI AVSRRRVGDS LLTPPWETVA P

> aaRXA02484 (1-501, translated) 167 residues
 MATRTENTIT INQPVGKVHQ ALTTEAYWAY IAENLSPEAG EVNEFTAADG GATATLFEVL
 PLEVLPFAVR AMISQALKVK RVLTPALTN NATTVEYNAD VKGTPVDFKG TIAINGDDAA
 TTFDYSNEVS VNIPFMGPAI EPKVADALGE LFANEGALTE KWISENL

> aaRXA02486 (1-636, translated) 212 residues
 MTEFSDVPGT AAPLHRALEN AGYSTLESID GVPYKTLIAL HGVGKTGLGR IQAALLERGL
 SLGEETKGAT ITPGHTGKVA SDIKTHITSV DPVAVVDGLE GRRVAHGHQL LSIFGRVTGA
 EPKMWGPSMI GYGSVHYVSH TGREGDWFQC GFSPAKSKIC LYGLKDSRPG EELLQKLKGY
 TEGRGCVYIN KPEDIDLVL EAMISESWAG QG

> aaRXA02488 (1-369, translated) 123 residues
 KLTATGVDVM GTFYPEGEAL APITLNLNNE VVCDEPETPV EPEVPVEPET PVDPETSVD
 ETPVDPETSV DPEKPGDDNK DDGSNSSSNG DILGILGILA ALGGVGALVY NFLVASGFLA
 AFK

> aaRXA02489 (1-624, translated) 208 residues
 MNRFPSTALL ASVAGAALAI PATSAHAAES ICTFTGDVGW NVRDSFNLSYL LGNIANGSAY
 KYKGGLDVRD GVQTDGNGKT PALTWVDSV TSSKISTSGG AHWGHNLYP GDDLAEPVNN
 FTLDLDFSNI TVELSGSTGR LLVDYTSREY INTHTLGEFQ TGEQAEALATI TFAKAPDLTS
 NSVNVTDGVA LTADGVEVFG GFYTAGEE

> aaRXA02495 (1-2568, translated) 856 residues
 MALTVLSVVL GATFLCGSLL LTHSLERTFS SIVDAGVEGV DVGVIQQNN PDGVPFSVIA
 EIEQYPEVRA VNIIGDGPGM PSGTMTGQS ALILTDSDGN PLQAGSSGTH PLAIYPQGEW
 VSPEPTLIDG HFPTKPDEVV VNASAAKRG LSLGDHLTIV TPTERIDATL SGTFSNTDV
 AGWVGVGFTP QRYVELLTNG TDASQITIAV NDGADPMVR NRIGNHRDL LPLLPEQIID
 QTTGDTDRQL EFMTYVLLAF AIALIVGSF IIANTFAMIV AORTGEFALL RSIGVSTFQI
 GFSVIMEAVF VGLIGGFIGI AVGFVVNAL VQVLNQFGDT LSSIDITYNA GSFIFPVLF
 VTATVLSIS PAHRAGNLPP VQAFESSDAR SDALGRIRFL VAAVMTLGI SLTIAGAVVS
 AINGDEFKTE TRLAFIGAGL LLVFFSLSL GPALMVATSQ TLGVAIMSPF RAVGKLAQRN
 TLRNPRRSAT TALAVTLSVG LVACVGIGA TTRASVFGSM ESTIKSPYVL DSIGGTMIPG
 QPAGGSRSL MSAAVAQEI QTRGVGVGT LMTGSVQVNG WDNENTTIFD GDLSQFLDLA
 VRSGDAFDE TPGVMISTTY ADQSDLEVGD TVTVNPYGS DGI RVPITGI YAETNLVGH
 MVNAAATNRV LTSADTYHRS QIFVNGDGST TNEELRDILV DAVAPFLIVQ VKSKDEFGRS
 LGTQINQLLG IYGLLLALV IIAVLGIVNT LFLSISERTR EIGILRATGV QRGQIRRMIT
 LESVILSIHG AIHGLLLGTF IGWAIVSCLR TRGMAPVEFP WTQIGLMLIS AIIIGGIAAL
 IPANRASRIS PLEAIN

> aaRXA02496 (1-807, translated) 269 residues
 VNRSNSSSVF LGFPESSPAA ASIRAGEELP LDFPREWYEF TDPTDIEHVF SIDLTWLESN
 WNCTFGTPDC LGIDSENADV GCCGHGAFLA DETDRDQLYD AVAQMPAKYW QLRPASTDSF
 LASDDGTDIE PWTWDELDD EDGNPEPALK TTVVNGACIF ANRAGWETGA GCALHQWGVN
 ANEDLTVVKP EVCWQLPLRR LEAWEERPDG QEILRTTITE YNRRGWNGG EDFDWYCTTS
 PRCHTNAEPM WKTQETELRA LMGPNSYEV

> aaRXA02498 (1-804, translated) 268 residues
MSEKLTVAE LMARAAKEGR STDAPRRRRR RSIEDGGVSV AELTGSIPAV KEKPAESKHS
SVPIDAPAEP EVVEAPKPEP AEEVEVASVE GDVDKQETPE RPAPSNEETM VLRIVDEKDP
ISLTTGAFPV VPAVAAKPAP VVRAEKDADV ETAVKADFAE VEVDNTDTTQ MAVVEEVDEE
PEQENKMSVF AIIMMAIVGV VLGVVVFLGF EMLWERLNKW IVAVLAVGVT LGMVGIIHAL
RTSRDGFMSV LAGIVGLVMT FGPLAIVM

> aaRXA02500 (1-99, translated) 33 residues
MGSVIKRRRK RMSKKKHKRM LRRTRVQRRK LGK

> aaRXA02505 (1-171, translated) 57 residues
VAGTHAYVNE TLSENEFSMC RKNPEGLVIE LENISIDRIV ISTPDAHRYA DELMAAV

> aaRXA02506 (1-882, translated) 294 residues
MHLNQLEFFI AVAQHGQINR AAEELLISQP ALSRQISALE KSVGAPLFER HSRGVSLTKA
GEILHEEARL TLSRMQSVVD EIQSGEHLIT SINIGVPPGI PIDWLRQQLI DLGPETRISL
IESPTDDQLK LLKQRELDIA LCRRQSEAF TTVLHEQELG IVVRKNSELH QKVAGKDNAT
LFDLEGLRVL AHSRGEVRIQ EEILKNAMLA AGVNATWIFR KFGQYSSLIA DLVQADVALT
TEESARTNFP SWQWVPIEGE DASGNDLVVR TWITWNPQPT PAVKALIQKF IDGN

> aaRXA02510 (1-636, translated) 212 residues
MDSSDSHVQ DVYVDQGLGE PDRLERLWAP YRMSYINTRS GGKQSTTAKR DPFIEVPKMS
DEDGLIVARG ELVYCVLNLY PYNAGHMMVI PFRKEKNLED LSLAESAEIM LFTQTAIKAL
KQVSNPDVN VGLNLGKASG GSVGDHLHVH VVPRWSGDAN FMTVIDGVKV LPQTLRQTRA
MLAQAWGTID GAPGTVDPTL TSAIRTAAPK EH

> aaRXA02514 (1-837, translated) 279 residues
NSHNPTPVTI TVTGKGEVGT SFGAISIEVE AGADAIVALQ YVSGGTHADN VEFIVGDNAR
LTVITDTHWN ADAVHLSNQL AQLGRDATLR HTVATFGGEV VRIVPRVRFT APGGDAEMLG
VYFADDGQYF EQRLLDVHAV PNCRSNVLYK GALQGDKNSD KPDARTCWVG DVLIRSNAHG
TDTYEANRSL VLTEGARADA IPNLEIETGQ IVGAGHAATV GRFDDEHVFY LQARGIPAE
ARRLIVRGFF NEVINKVPVE SIRGELDNRV SSELAVLGM

> aaRXA02518 (1-411, translated) 137 residues
MSEHTENTTE VEDQNASTFE AQSSERPEQS EADLAKASDV EYMRDVIDP ELGINVVDLG
LVYDIYIING NEAHIDMTLT SPACPLTDVI EDQARTAIVG NGIAEKMSLN WVMPPWGP
MITEEGRAQL QALGFAV

> aaRXA02519 (1-1806, translated) 602 residues
MFSAPLRRMM RVTKDEQIQP NSNAPENRKW FPRAPRPLRQ FLDTLPRIGT AGSRSATLHV
EDEQSPLGAT LFDVATGASS INDRD TDASG LEPEKIRRFA WLRLIGTMGA LMIAFGALGA
GALPVVNNPY VDFPGGNFMS RMLQTSSMIV LIGVGFLVLA WVLMAPLVGI PFKRSGNRTA
SVSLMLRRT FGAWVAPIML TAPLFTQDIY SYLAQGSVTA QGMDAYAGGP LELLGPDNHL
ARSVPFIWAQ SPSYPGPVAL SIAASISVIT NDSIVGGVLA HRIASLLGVV AAGWAITMLA
RRCRVSEAS FYLGVLNPLL ILHLIGGIHN ESILLGFLLV GLELGLRGTD RIQTGLWGPA
WTYIALSGVL ISCAGLVKVT GFIGLGFVGM ALARAFHARG HRHVVAIGVA GLVQVAALVI
TVVVL SVITG ISLGWITGQG GAATIRSWMS MTTNIGVISG FIGMNLGLGD HTAAMLVTR
AAGIAVAAAF MVRMLFATYR GHIHAVGGLG VATFVLVILF PVVHPWYMLW AIVPLASWAN
RLFFQLGVIA YSTAFSFFVL PRGLALPVGT VFSIYFGAAL GFSILLVGVW WSLRRNPTFG
LH

> aaRXA02520 (1-684, translated) 228 residues
VGDVVKGNDA HTGDGDTRRK ILLILLERAP VIASDIAEQL QLSTVGVRRL LDNLVEENLA
EAANPRQNPY EPKMRGRPAK TYRLTDKGRS IFGHEYDSLAA AALATLREV GGDDAVRQFA
RKRIETIVEG ITPADVTDQS IEDTAKSLVE AFSRHGYAAT VDATRNLGLQ CQHHCPISTV
ATEFPPELCEA EHQA VSELLG QHTQPLATIA DGHGICTTNI ALTPIKHS

> aaRXA02521 (1-1443, translated) 481 residues
MTSATTPNGV NEPLTDDQII ESIGPYNYGW HDSDDAGASA QRGLSEDVVR DISAKKSEPE
WMLQQRKAL SIFDKKPVPY WGADLSGIDF DNIKYFVRST EKQAQSWEDL PEDIKNTYDK
LGIPEAEKQR LVAGVAAQYE SEVVYHQIRE DLEEKGVIFL DTD TALKEHP EIFQEYFGTV

IPAGDNKFSA LNSAVWSGGS FIYVPKGVHV DIPLQAYFRI NTENMQQFER TLIIVDEDAY
 VHYVEGCTAP IYKSDSLHSA VVEIIVKKGG RCRYTTIQNW SNNVYNLVTK RTKVEEGTM
 EWVDGNIGSK VTMKYPVWM TGPFAKGEVL SVAFAGEGQF QDTGAKMTHM APYTSSNIVS
 KSVARGGGR AYRGLVQINA NAHHSTSNVE CDALLVDDIS RSDTYPYNDI RNDHVSLGHE
 ATVSQVSEEQ LFYLMRGLA EEEAMAMIVR GFVEPIAKEL PMEYALELNR LIELQMEGSV
 G

> aaRXA02524 (1-690, translated) 230 residues

MTETTPQPPK PEPELPKFLS NPERADIILF IALIVMGIFS LCMIPLRAWM LTQPLAYTLI
 VGGYTSVVVG GANASVENGI WWVYWLCTLI GALKFMPVYW LMGKRWGMEF IDMSLQYMPR
 FHRMFKKSVD SESTRLYAWI IGLIPLAYLP GPVPGTILNA VAGLVKIPFW IIMAWNAICV
 LSVNGLFMWL GYTFGEQVLD IVNVVNRMYL WITLGLLALM FFRARKQFAK

> aaRXA02525 (1-378, translated) 126 residues

MTTMREVSTD LNILIVPSEW EKVLENLPAT LSESGFVASE IHSQIVDLTC EPDNMLVTQF
 SQLEGHPIIV EVLHRLVING SSDLELKDIT KKVVGALPQG TYWYGTSLEG ATEPGVNASC
 AWQHRG

> aaRXA02534 (1-804, translated) 268 residues

MNSPNADIIL VVNKLSKFID IENIMLVGAR CRDIHQKQYR DQTAGRRTKD VDFALALESW
 DDFNLLKQQF SPTGNAWQGI TIGNIPVDLV PFGNIENPPG EVLSRKGHLL NVAGFKEVFE
 QAELYPLNDA IDIKLSTVPG LTALKLHAWL DRKENNIKDA SDLALILSWY EEDVETLWNR
 YFALENQGYI GEPEAMAAEL LGLDTGRILG HKETQALLDR FNEQSPPELN QFAESLEAPP
 EHSHPLEERR IQVEALLGGL RDSLGYDE

> aaRXA02537 (1-462, translated) 154 residues

MLALKSSELE GIATSLTAVA GALHESNTDR LQSWQQLETM TSASSLIQGF IKLVDYNRPT
 VNIVEQMHTK ASTLFNTADF LRTLEGYVDV LEKQADKSIT LTVMLRYIAS LSSLLDLMCA
 REINALCTAI TPEPLKHLGD FGTLPQQT SFIW

> aaRXA02538 (1-672, translated) 224 residues

VNAPPEIRAL AEAHPDMQIL EAGDGSVLAS FGDIDRATTV TTIVAGVGSS NPEGWNTYVD
 RARTVSASTG SATVLWLGYQ APASIPAAVS GAAANRAAAD LQRFQALQS RNPHQRKVV
 GYSYGSTVVG KAASSGELSA DALVLVGSFG AGVSHSSQLG APVYAVTGSA DFIGFAGTQY
 DGIHGTPTA ALFGATVWDS PSTHSGYWND QEFLGNVAEV VRGK

> aaRXA02540 (1-438, translated) 146 residues

MASTPKKSND EGQFDRVDFQ GEVVISVAA ELAGMHAQTL RTYDRMGLVT PIRTRGGRR
 YSRADVELLR EIQLSQEEG VNLAGIKAI ELGEENRNK ESLRKVTAEN EQLKDQLRSG
 RPRGELVHVP RSTAVVMWER RKGRSK

> aaRXA02544 (1-1428, translated) 476 residues

VSHTCGIVIF VSTESGNTPK RDDAKSTIPP KDLPTVLDA IEGNFEPPLN TQKSAVPPNA
 EATVEADSEG TTDRLSVILGR DGRWLSGWAL RFIVLVIAGV IALRMLGFIW VGILPVVLAL
 LVCTVLWPPV KWLREHKIPT ALAVVITILG FFALIGGVFA AIAPSVSSQT KQVVDQATVG
 IEDLMDWVQG PPFNLDISQF EGALNDLTSM LQSQSSTIAS GVFSGLSTAS SIVVTLAVML
 VLTFFFLKDG PRFLPWMRGF TGENAGWHLT EVLTRTWNTL AGFIRAQALV SMVDAIFIGI
 GLLLLGVPMA LALAVITFFA GFIPVIGAVS AGALAVIIAL VTNGVTNALL VLVLLILAVQQ
 IEGNILSPFL QSKAMNLHAA VVLLSVTVGS TMFGIIGAFL AVPVAATLAV WVRVHSEMVA
 LRAGEITSDD IEIATTKGSP TSLNGQETLA AIRSRFAILG RKKPTSATAE KADSES

> aaRXA02545 (1-558, translated) 186 residues

MTETLFVSAT TEEAVYLPDG IDLLVTGIGT TAATMILTKE LATREVLPAR IVNIGTAGAL
 VDGLAGVYEI EYVLQHDFFS ELIAEMTGKP CSNGSTLATS GHFPVASLAT GNSFIADSET
 RNHLATRASL CDMEGAALVG VAKHFGVPIT LLKQVSDSAD EEASGSWFDA VDAGARQLAE
 AVKEFK

> aaRXA02546 (1-1104, translated) 368 residues

MPLFIDDALH RSKKYFHAHL SELLLGEFAG LSLPLHPPTA AKAAADIDAT REFIRQWEGR
 DDVEYAIRNW SPVGLGKTEV PVRLTLNTE ELVVFAQVED EWSSLHERFS QLSGFTAEEV
 AKHVSLWRSL SNDDLSKAVL VVDWFLKHPN SGLLKRAVAV EGVHTKWLEN HRVLIETLVA

DKRGEPGRAD LGLGDAEARV RLRFHSDVAP AGLTDIEVPL SNLCELQEPQ VILMVENLDS
 FLALPTWPGV TIAWGAGYRA VDIVRGPFYS NGRLLYWGD LLDGFKILDG VRSHVPHTES
 VLMNSETVSR WRYLGVADRE FKAESFDNLH DFESDALDLL ITDGELRIEQ ERIRLDVAVE
 EIEKVIRG

> aaRXA02549 (1-1326, translated) 442 residues

TLTAISSETW PIMLAPWVCL PLLSRNV DAR AIALSLLPAA CMGAVNATAT MAALIPAALI
 LLYRGLFLRL LLWGMGVLLV NSWWIGPLL LGKYAPPFTE FIESSSVTTS WLNPEILRG
 TTSWTPFVDT ERQAGYLLVN DALFVTL SVL VAALGLIGLT LMKHRLWAF MLAIGLLILG
 SAHLTAVQEF LDGPGAALRN IHKFDLLVRM PLMVGVAALG SHISLPLLGT TALTSQGQKH
 HTIPLPLQKR QAAGLLV VII AVGALAPAWS ARLLPQGTWD EVDPYWEAT EFLNQ NATGT
 RTLIWPSSPF ARQDWGWTRD EPAQPLLDVP WAVRDAIPLV PPEAIRGLDG LDDLGLTGTG
 LNDEALKRLG IGAVLVRHDL EADPDIEVDL PGEKHTFGSQ GQVDVYLTDP DRNMWITS GT
 SKQLPTVAGG GEILSLLDTI NG

> aaRXA02552 (1-795, translated) 265 residues

VGKHAAETSE PKNNSPWRIG LLTFLISSVV VTLVGMV MLW PDSDDVVLAD NFSQTFAGNH
 EQVDGTITLV DNSACNSPDT GRVFAESPTI SAEPATLECV RALVDITSGA NEGQKTQLIT
 YAQPGDPEFS EGDKIRMVET PDTNGEIIYT FADYQ RGPAL IIGWVVLIVA MGAFAAWRGV
 RALVGLVVT L GIVGIFLLPG LASGHDAMWL ALVCGAAILL IVVPMVHGIN WKSAAALAGT
 LVALLLSAVL SWASIVTTEF ARTGR

> aaRXA02554 (1-624, translated) 208 residues

MSHTKPSIAI LGAGRVGSSL ARSAVAAGYE VKVAGSGAVD KIALTAEILM PGAVPSTADQ
 AVKDADIVFL AVPLHKFRSV NPATLEGKIV IDTMNHWPV NGELEEIDQD PRSTSEIIAE
 FFAGSTMVKS FNHIGYHEIE QDAGTGRAIA YATDDVDAGA QVAQLIKSFG FVPLNIGALE
 NGRILEPGQE AFGAHLNKDS RLELVNQR

> aaRXA02555 (1-603, translated) 201 residues

MGEQFPDGKN IRVSDTERSA ALAALGQFYA EGRLSLEETD DRCEAVADAK TRGDLN AIFY
 DLPNQ QIAVV DRSEQTYTAT EVAELHRKGA RPRAGILGLT TVLAITGTAA FASTTAFATV
 LLALIPIVFI MLYVMKIGPE SWHAPT PRQL QRKRMIELRE KEKL RDMELK AQRKERTHAL
 TNRALDAAET AFNTKPWKKN K

> aaRXA02564 (1-675, translated) 225 residues

MAEVGAEPAG SAQSKTKQFV VGTAADVITA IAAFFSIQSA SGGEDIRSNM TLIAPAAAGG
 GWDTFQREQQ QSMRVNKIVN NIQVVNIPGA GGTIALGKLS TMTAPNTLMV GGTGHIAAQI
 QFDTPAKIQD VTPIARVVEE FDIITVPADS PYNTLEELIE GWKADPAGVS WTGGGSFDQL
 VMTEIALSAG IDPKQTT FIP SDGGGEAIQA LLNGTAKAST GGFAD

> aaRXA02568 (1-1359, translated) 453 residues

IPAAPSAPGS AIPTPGTAIP VPGSATPVPA PGVSAPGASV PSIPVPGSVT PPAPGISAPG
 GALPTPGSAP PTPGGALPTP GEALPVPGAP GAPGASGIPS PGLPTPGVPT PGASLPVPGA
 PDAPGTPSIP AAPGIQAPGI PAAPGAPQA AAHAKPVFQD AEKRPRTEA GNAKKELPLR
 VRLAQPI TRK QWAMTLGVLV LGAIVVAAIA VVLAKWAFTT EWLQDFVEKY PGKYDNPEGA
 PVGIPTWLSW QHFFNMFFMV LIIKTGIEIN RTRRPKGYWT PKKGGKKISL TLWIHLVLDL
 LWIINGAVFI ILLFATGQWM RIVPTSWDVF PNALSAGLQY VSLDWPTENG WANYNSLQEL
 TYFFT VFIAA PLSIVSGFRM SSWPKNNAT MNKLIPIGFA RALHMPVMVY YIVFICIHVF
 LVLATGALRN FNHMYAGQDV VNWVGFGWV ASL

> aaRXA02569 (1-750, translated) 250 residues

MSRSSKISVA FGGLLIAATW LYLVLRPTD WESVGGSTEA LITLVGYVAG TIALLVGVLP
 TLPARTIAII PVALVLNILL QVGTGSFVIP LYLDVAGTVL VAALAGPSAG LATGALSSVV
 WALFNPLALP FAAGSALTGW LTGVVIKKA FKNIFATIIS GAVIGLITGA VAAPVAAFVY
 GGTAGVGTGA VVSLFREMG N SLLASVTWQS FISDPLDKAI VMLIVFVVVK SLPKRTRAL
 VPQRPEDVA

> aaRXA02570 (1-642, translated) 214 residues

MNPLTWIIGA FSMWIVVLGV NKLGLSIAVI IIAQVAMIR VRNVSVLAST ALLSVPALAS
 MALIHMPYSS DGWLIALTLT ARFSALMSIF LLAATAITIP ELVKS LYRWP KLAYIVGSAL
 QMIPQKGQTL ALVRDANALR GRSVKGPVRA VKYVGLPLIT HLLSAGAARA IPLEVAGLDR

PGPRTVLVEV VEGRVEKHCR WLLPLLAVGM AWWL

> aaRXA02573 (1-444, translated) 148 residues
MTNKTMLVAF DGSPESRRAL EYAAKLLQPR TVEILTAWEP LHRQAARSVS LITLGVEPED
PAHSAALKTC QEGVELAQSL GLEARAHMVE SATAVWSAIV DAADELRPDV IVTGTGRGISG
WKSLLWQSSTS DSVLHHADVP VFVVPPLD

> aaRXA02575 (1-1158, translated) 386 residues
VKNSGKNSAK NRTKGILIGV LVGLIAIFAG IYAVDVFLNK DNIPRGTTVG GVSISNLSAQ
EARTKLETEL ANDVVQPVT TAGEQSTTFD PVASGVGIDW DATIEGTGEQ SWNPITRFVA
LFKESESPIV STVDPAAFDP TLDRMVGELY RDPISGNLHI DAGTLVVNDT IDGQAVDRTI
LEQAVTENWL NPEGVKAEPY VVPAAISQDT IDKLAEGAGA KAVSSPFVVR GDDGIEGTIP
VERMGEVVSF PEENGTIRVD INAEAAATAML AEGLKETEIE PTNAQISFSS GSRVVTPEVT
GHGINWEETL ADLPNNLTGD GPRITDAIYE DTPATFTATD AQNATFNEVM GEFTTGGFSA
ASGTNIRLTA QMVDGAVVSP GDTFSL

> aaRXA02576 (1-1422, translated) 474 residues
MTPTRRILLW AWTTVLLGSL LWPLAAPGEL LLRDMSVVDH PALSINALGF GDLPSRNAPQ
DGVLLALLGFL PVSIVIRTML LVAGFAGAWG AMRLGPSKFL AVTVAIYNPF VVERLLQGHW
SLVMAVWLFV LVVALRRHPR WQVVAIWAAS LTPTGAVVAA VTGVASSKRK RFTTLCSFSL
WLPWLIPALL ATPTS GGALT FAIRSETYAG TLGTALGLGG IWNAGAVPAS RELGFAVAGI
LLFAILLAGF KNCPWVLALL AVVGFMGAIG PWLMPNLFTW TIAYVPGAAL FRDSQKLLML
AIPAYVCLAA GVKSPLSWVA TGLALLQIPD APREVS VIRP SSAHVESVEA LAEIADGRDI
LIIGQGPLVT REDGIPVVDV KTKALSVVES GELRVDGIIT DAPSQRWTEA TQAWAAGDIE
RLEELGVGVV VDGDTITETG APPQHGWKYY LGVGLTVLWM ALPLGLLFRR KTKK

> aaRXA02577 (1-885, translated) 295 residues
MGAYDWVDII STCEFS GKVV AVFMKRSATV LIIAGVLFLI FAFTVPPYVT GQARTIPKDL
DLTLVSESPQ GFVRTEHIVT APTEKVDEIA THVDQTVTDV QGKTVAEISD DVVLIGHSTRY
PVIKPTATIS GSPADSSNVV REGHYFFPA NTLRNSYPY DIVLGEDSPV DYVSREGNTY
TFYQHRLRVP LDDSHYSVE RTLKVDRFSG IIVAKDEAMT FHGPDGDDTV EFTYTADTLK
LLQDHAHDID QRLSWAKGFD FFSKFLGLSL LAIGVFLTGI FKRQQLMSTV NKLRS

> aaRXA02584 (1-351, translated) 117 residues
MSLLCDSIAI GLFALFARVA HQSADMPLNV QGWFFTWLPF LAGVFIAYLV AILPAKLPSE
RIRPAGLTVW ILAVIVGLVI WGFNNGGVPH WSMIVATTA SAILVLGWRA LFKVTMR

> aaRXA02585 (1-981, translated) 327 residues
MGIQIRHVS PVGVALTMVA LVLSFVAMAR VMQIMLKAGG SPATLKATTA LTFAANSWSA
TLPGGPAFSA ILTYKVQRSW GASAVLCSWF FLLSSALSTV WLVALGVIAV FYMGASLNLW
SLIATFIAMV GLSGAVYWAA NNPDSLARVW RKLTKNREWG FVEKLLGSIE QLRVSLTGP
QFAASTAWSL GNRLFDAISL WICIWAVTGT APMFEPEPNN TTIAGVLLAY TTAKIAGSIQ
ATPGGIGPIE AAYIAALVAT GMTAVEAAGA VIIYRLCSFI IMAIVGWVIY FIYFTPQGLK
ANESLDVEQD TINSDSNRQS AIERPDT

> aaRXA02588 (1-684, translated) 228 residues
MSDVHEVIHS YNPTDKEGPE SVLLVWDAPN LDMGLGAILG GRPTAAYRPR FDAIGRWLLA
RAGRRRAHEL RHIEPEATVF ANITPGGSDV VRPWVEALRN VGFAVFAKPK IGEDSDVDPD
MIDHIRRRYE EGVLRGVIVA SADGQNFRET LEELVAEGIP ATVIGFHEHA SWAVAHDTIE
FVDLEEIPGV FREPLPRVSL DNLDPGGAWL QPFRPLTALL SNRHNSQE

> aaRXA02591 (1-1830, translated) 610 residues
MTTAAIRGLQ GEAPTKNKEL LNWIADAVEL FQPEAVVFVD GSQAEWDRMA EDLVEAGTLI
KLNEEKRPNS YLARSNP SDV ARVESRTFIC SEKEEDAGPT NNWAPPQAMK DEMSKHYAGS
MKGRMTMYVVP FCMGPISDPD PKLGVQLTDS EYVVM SMRIM TRMGIEALDK IGANGSFVRC
LHSGVAPLEP GQEDVAWPCN DTKYITQFPE TKEIWSYSGS YGGNAILAKK CYALRIASVM
AREEGWMAEH MLILKLINPE GKAYHIAAAF PSACGKTNLA MITPTIPGWT AQVVGDDIAW
LKLREDGLYA VNPENGFFGV APGTNYASNP IAMKTMEPGN TLFTNVALTD DGDIWWE GMD
GDAPAHLLDW MGNDWTPESD ENAAHPNSRY CVAIDQSPAA APEFNDWEGV KIDAILFGGR
RADTVPLVTQ TYDWEHGTMV GALLASGQTA ASAEAKVGTI RHDPMAMLPF IGYNAGEYLQ
NWIDMGNKGG DKMPSIFLVN WFRRGEDGRF LWPFGDNSR VLKWWIDRIE GHVGADETVV

GHTAKAEDLD LDGLDTPIED VKEALTAPAE QWANDVEDNA EYLTLGLPRV PAEVHSQFDA
LKARISAAHA

> aaRXA02593 (1-213, translated) 71 residues
LKIAHFDLDN PADESSYIFA RSLAEVDGWT LEFGVAGVKN TTISSSIDDA ITTILRWNG
EDIRDLNWTR A

> aaRXA02594 (1-324, translated) 108 residues
MEAMATTITV FSPTHSPAQI RETILSAAKE DDVDFLGVPF THPRNVITIEV DDELINDCLG
WLDDVALASG LGIQYNDEV LRYGDEDISFT VQTKNDDAR IGASRLGL

> aaRXA02598 (1-591, translated) 197 residues
VTTDQNKRS L SELAARIVSE ICAPWVLNIG FFLILGGVTG AWTLGIVAAI GTGIVPMILI
LGLMKLGRVG NHHVTTNRQ GLVFVGIIVC VIILIFILRA LEAPQLIWDG MFSALIFLVL
FAQVTLKIK SVHVGLWVCL VMFLGLTVSS WWLLGLLFTP VTAWARMRIK HHTMSEIVAG
VVTGAVATGI CYALLA

> aaRXA02600 (1-1398, translated) 466 residues
MQPFPLSLTN SSVAGIAAGA LLFLSVPFAS PVHAQTILQD TLEVTVLDNA DELAPEDEDF
LSTETPKIDF PDSVTAVRYI TLTNDTKIN DDVENYLRAE HPEWIQTNSF APGEVIAVG
FDPNTMGAYA GNDVAAETGI AEQDRIDGTT DAMRPLLQDG RIALGMLEGA KSVADTSVVR
ESSAPSGGVI AAILGGIAAL VAIIVAWATS YANKKKA EKA REQFDYASRH YGEVAQQLDG
INVRAHSLTS PLADDELRRQ WDDVNSRFLE VNDIFGRLEG LTSTSENKAF RKALPDIEKA
HTAVTQMEIA QKNIDTLYDM EHGHEDETRRR ELTRLRADMQ EARQDINDKD AVVDDILRTL
IQTETIAPS APDFMDQYAR LIRDYAVALQ GVEKNLEQVK QTERNAPAI YDDNWRVGTG
YNSWVPYYMI SSWHAADVSA ASSASSSSAN TTFSSGFSGA GGGSSW

> aaRXA02601 (1-1989, translated) 663 residues
MKGEDTMSA TNLAVEQLQR VLLPRRGEPA DVRSYLLEA ESNKERLEWE DRFSVSVPA
AEVSFQTYFN AFPASYWRRW SQLDSVVLKL KVSGEARVDL YRSKIDGARI GITGSVVKDD
FIEFEVSLAP FEDGGWIWFD LTAETDATVE EAGWYAPHAP KAQIMPDGSE VGPFEARATV
GIPTFNRPAD AVAALEALAS DPAVDAVIDT VIMPDQGNKH PADEPGYKAA VEHFGDRFFE
FRQNLGGSG GYSRIMFEAL GGVDGKGEAG AAKSPYILYM DDDIAIEPDS VLRALQVARY
AKSPILVGGQ MLNLQERSHL HTMGEVVGGH DFMWTAAPHV HYDHDFS AHP LHDGRKFDDK
PDAPNSRDLH RRIDVDFNGW WCMIPRVVA EQIGQPLPLF IKWDDAEYGL RARKAGFPTA
TWPGLIAIWHM AWSKDIDAID WQAYFHLNR LVVAAMYHQG SVDGIVRSMQ KATFKHLLCL
EYSTVAIQNE AMKDFLAGPD QLFSILDTSL PRIAAIRKTY PDAVVLPSAT ELPRATGAPG
VPTKDIGGRL APIKKAMWLA KGLKHSLSKE DASHHEVPQA NFAPIEARWF SLSRVDGATV
TTADGRGVVY RKRDRDKAKE LGKEARALQK QVAERFDELS RAYRNAHPEL VSREAWGKVF
DEQ

> aaRXA02602 (1-504, translated) 168 residues
MSNKEVQILV AIQDQLMDAP GVLPTARGLS LLGEHAAGWL ALGAGGAVVD KKRSSWAGL
FIAALGSHAA SVIIKRVVRR ARPHDPAIRI GVGTPSKLSF PSSHATSTTA TMVYLARITK
SPVPLLGIP MVL SRMVLGV HYPTDVLGA LLGAATAEAV HKIERATK

> aaRXA02604 (1-2076, translated) 692 residues
VLACGLMTFS PQRPEFETGK QPDPETEHAG DFFEETSSSA PRAASNGSSG PNYTLITTF
AALTAGIFAF WAGWTRKWIS DDGLIVLRTV RNLLAGNGPV FNAGERVEAN TSTLWQYCIY
LVALVTDYRL EDIALWLALL FTTAASIIGV LGTAHLHRKR IAVLLPAGVI GYFSLSPARD
FATSGLEWGL SLMWISIQWL LLVLWATSGK TSGKKASGAK TSNPIVNAGA ITYALAFWSG
LSWLVRPELA MYGGLTGVL LLTAPRWRV LGILVAALPL PAAYQIFRMG YYGLMPHTA
VAKSASDAVW GTGWYVEDF TGPYNLWGL ALLLAAGALT VWKTDKHLAI PKGRGLRLTP
GMAIALLVIC ALVHFLYVIR VGGDFMHGRM LLLPLFAILL PVSVIPVNVV DRGWQDLVAL
VLVFTSWVWS TVVFVQGHQW ENTGQHVVD RDFWIDFTNR DEDHPPLYAE DFLTVD SMND
YAEVMRDQTL VNPTGQQLNI LASSDPTTYS WITTPRVEGV EAGDLANLSP TVFHVNLGMT
SMNAPLNVRV TDLIGLATPL AARQPRIEGG RIGHDKLMDL EWQVAESATP LAYTPGWLD
QKTYEARQAL RHPVLVHLFQ TYREPMSYHR FVDNIKYALT TGRLEISDN PEDLLKEFNP
TPAEIQDGL TIAWPGEIKL DEPRGEPLYS SQ

> aaRXA02606 (1-1371, translated) 457 residues

MQEIHITIMKH MDALIADPSA AAFKATLPFA ELLEKLHNKK ALFDAALAKS AERADAGRII
 GKTSHIDALA YLLDISKSEA FRRTKRAEEH YGNPSPEPSS EELAKETPEE KLAREEKEKQ
 DLAEQAEANR IAREHGISAE KQDTIRYELE KLNDNTSLSR ASLRKLAMQE ATSRTPEDLR
 NWTRNKVIRI NPTAKDPLAA VKKRSLSIGR QDHDGGAKAS LYLDAGGLAL LKSLMSKAKP
 GHLLDSLAE DKRTKPQRQY DAFADILHRA HSDLLPARSG VGTILVSLSA KDVNTLNKASG
 PDHRYPTSTG IKLTPLEILR LGAAYDFVT VLDSESGRPL HLARTQRTAS LYQRLALFAS
 ELVCTREGCD SPFEDNEIHH IRSWLDGGPT DIENITNICP HDHGNNNDQR DGKDNMGHMN
 IDPTTGRVGY QPADRRKPMR FNNTAAAES GGAQART

> aaRXA02609 (1-249, translated) 83 residues
 VERSAEAQAF LDALKDEKID ISGVEDQLIA TARNYCSEN KDQNVTVDAV AGQLIVQGRT
 SVKEDQAAEI STLLKESADR TYC

> aaRXA02610 (1-927, translated) 309 residues
 MRKTITVIAV LIVLALIGVG IVQYVNTSDD SDFIGQPGEP TGTETTEPPV QPDWCPAVEV
 IAAPGTWESA ANDDPINPTA NPLSFMLSIT QPLQERYAD DVKVTWLPYT AQFRNINSQN
 EMSYDDSRNE GTAKMNEELI NTHNECPATE FIIVGFSQGA VIAGDVAAQI GSEQGVIPAD
 SVRGVALIAD GRREPGVGQF PGTFVDGIGA EVTLQPLNLL VQPIVPGATM RGGGRAGGFGV
 LNDRVQDICA PNDAICDAPV NVGNALDRAL AMVSANGVHA LYATNPDVFP GTTTNAWVVD
 WATNLIDNG

> aaRXA02617 (1-507, translated) 169 residues
 MSIKHALLVL MLDEPTSASQ LQTKFEETMG IWQLNIGQVT QTIQRLQRDG LAETAGTTVS
 SNGRTVDTFQ PTDLGRELVA QWFESPVTVT LSEDELVTG IAIAESRGLN LIPLLDIQRN
 TVMAELRALN KSSRDLAETR NTQRLLEVKR IFELEAQARW LDRIEAEQ

> aaRXA02619 (1-900, translated) 300 residues
 MRSVVLELLE NWKESLVLHP SLTELADAAAP LAQDFATVRG VLKESLDLLG NALNHGEEPA
 ELAGWLSQVI TDVLHSPGLD AHVVLTPGVP RGDALPTSPV RWLAVVDSQE DPNEKISALL
 TEVGFIAEPI GAATREEWEQ RARAGEDPEV YLDAGTWVAA IAEVDDKALL QDALSSRPPA
 VETYEGLPSL DMVVNIRENL MIPTVKIARW AAHKAGSLAP TTAQRLVDAR GVLTNDEVDA
 LTQVWTSALS LQSKRWMDHI HDQETTAWEL PALQRATFGA SARLLSEVLR SVEAREIDTK

> aaRXA02620 (1-654, translated) 218 residues
 VGRPRRSAPR RAGKNPREEI LDASAELEFTR QGFATTSTHQ IADAVGIRQA SLYYHFPSKT
 EIFLTLKST VEPSTVLAED LSTLDAGPEM RLWAIVASEV RLLLSTKWNV GRLYQLPIVG
 SEEFAYHSQ REALTNVFRD LATEIVGDDP RAELPFHITM SVIEMRRNDG KIPSPLSADS
 LPETAIMLAD ASLAVLGAPL PADRVEKTE LIKQADAK

> aaRXA02624 (1-714, translated) 238 residues
 QGYDDASAVV ALIVLSILYL PNMMIFAMGN LIGSPLYFGD ASISVFSVHS VPLPPLPILA
 ALPSEALSWA VALLVIPAI ATWVCVRNPM RLAVNTTAAV ISALCFLVLA VFAGGTLGVY
 NYVGLNLLAS VGLVFVYFAL VGLLIAGIDK LRNPVEVKSV KAVAVVEPEP EEVEEDEEH
 VEEVDEEEE EVEEGVEEVE EDDAEDPEEN PEEEEDEEI ETETEAEETN DGSEAEDR

> aaRXA02639 (1-834, translated) 278 residues
 MIALGSAPKL VASDVGTLI NSSSERVPQRL RDVITRMTNQ GVTALSTGR PPRWIHYVLD
 QLSVKPICVC ANGAVLYDSA ADEILAAQTL SPEVMASAVM AARAALIEHG GVSIAVERAG
 KSAYDPADEL FLVTPEYSHA WPSNDHGTFE EAEVLSEPAT KLLMRSYLD SKQLFDIVRA
 SVPEDQVHVT FMSGGGLIEI AAPGVTKALG VSMLAERLKI AQKDVITFGD MPNDIEMLQW
 AGRGVAMGNA RPEVKAVSDH ITRTNDAGV ADVLEWWF

> aaRXA02647 (1-462, translated) 154 residues
 VALSVFTPVA QAQSSDALTO LSDNITSSQI LDDDGPNVDG NETWPGSSEG SSMLSNGDIP
 AAPSLSSSGK DTSDDDEIS EEQQUALIDRL SEMPVIGSIV SPPEWLAIPF AVLQGLLAIT
 TLASTAASFV VTDPSFKQT LRDMLTQFGI NVDA

> aaRXA02649 (1-1002, translated) 334 residues
 VLKRFSSHSS PQVLSRKVVA SALALTALA LAACSSSAEP DSPEVEQAVG LAVDTPRVVV
 VDPGTGDLQR LQYKDIAPDA TQEQTNIAE GFAQSVVNAD SVDPAAPAGG DVTTFHLPVK
 ATTEEAEFSD QEMVSATRDI SLLFGKPTYT DLSQVEDVNS TEGFTLGIRA TDSGQHTTLS

FAAPVDSTET GRMLMEQYLL TFTSLPIVFP SDDIGVGAKW TVDSRVGTGES TLLQTVTYTI
 TGIDGDKVNL DVEVSQRPSM GALEITDEES DETTGQLTVL NSNTTSVGTL EVDLTQPLPT
 SGQVSWTTRV IYGGSENEQVR VVQDSTSSVS FGDQ

> aaRXA02652 (1-579, translated) 193 residues

MDGVDKGRRI VALLAILALV VVVAILSFSR RTAKPMQLNG DMLGQDNTET SVEYRQRASE
 SLENAAVGEE AYSLVTFTQP LSPSEASNLL KGVGRVNAV MLAPAMDLP EPIAGETRED
~~VFNRIKLVD AQLSGIGNVR APGELNGVVV WDIPQKVRVL SESSLVYSVE TLPPDAAWGS~~
 FGIRPVDTSR TNF

> aaRXA02655 (1-984, translated) 328 residues

MSPEAKEAQD SRRNEMPEKK RAVLRKAIKL EWATIAWVLF SIVLVGVVAG QSQAMRSAWI
 EDMLSLVPPI AFLLASRISK AVATRKHPYG KHRISIAIGHQ AAALALLIMG SLLIYEAVSA
 LIKGERPPIG LAILFGHDVW SGWLMIGVMI SVSIPMVIVG RVKINLAKDL HDKLLYADAD
 MAKADWGTAV ASTVGVLGIG LGFWWADAVA ALVISASILR DGVINMKAAI SDLGDGRAMT
 YDNSAPHPLN DDVEKAALEM HWVKHARARI RDQGRCFHTE LFVEPVEGYT PAPEEITSLV
 KRIQNLDWKL QDVVASVVEK IDRFQAPS

> aaRXA02662 (1-264, translated) 88 residues

MRRKLTITLE NKPGARLGGF RALAPTSKIA LVFLLIFLL AIFAPLIAKY DPLASGTPVQ
 PPSGEHWFGT DAIGRDIFSR VATAPEPP

> aaRXA02665 (1-480, translated) 160 residues

VTNPIIPRVG IATDAHQIEA GKPCWIAELL FEGVDGCEGH SDGDVVAHAI VDALLSASGL
 GDLGSFVGVG RPEYDGVSGT QLLKEVRELL SAHGVIQNV AAQLVGQTPK FGPRREEAQQ
 VISEIIGAPC SLSATTIDHM GFTGRSEGRA SVATAVVWKA

> aaRXA02670 (1-582, translated) 194 residues

MEDESVKSLN LAARRGALVT VAAASALALA SCSAGQITQT SSQVAVDGN QAGSANDPVL
 VRDVTVHLTT DGEAGVKFTA INQDTSHTSH TLESVTVDGE EVELDDAEPI ERNCSLVADI
 QSELDLIEEP EVGCIQHVAT SLENPGFAYG GVVPEFVFD TGATIDATV SAPVLESQVE
 NREVGDTAE ASHH

> aaRXA02672 (1-1098, translated) 366 residues

MTPTTTPVSN PDALSTGTQD VHTLKGTLQR LAPGTPLRDG LDRIVRGHTG ALIVIGDDEN
 VSSICDGGFE FDSVFAATRL RELCKMDGAV ILSSDLERIK RANVQLLPSP TWPTQESGTR
 HRSARTALH TGVPVIAVSE SQNTITLYVE GKSHMLEQPA ALLNRRANQAL GTMERYDRDL
 DQVNNRLHLA ELHSYVTVID VVSVIQREEM LRRVGEIIDG DVLELGKDAK EIQIQLSELR
 GDNDRERESI IADYLVTDGI PADEEIHAAE EAISHLDDKA LLNPANIARV LGLPPTTEAL
 DEPVTTPRGYR TLNRIPRVQK FLMDKLIVEF GNLDALLNAS VEDLSAVDGV GSLWARHITD
 GLGRLS

> aaRXA02673 (1-633, translated) 211 residues

MAALLVLLV IALIIWAVVA LRGGSEPEE EQPNAVVTSS SMESATSSSS SSKESTTEAT
 TEEETSSAEP TATSSVAADA KKTCELSDLV ISASTNQPTF SGSAQPELFM AVHNPTAVDC
 EIDLEENKLR FEVYNLATNA RIWSDVDCNP AVEDGTSVFP AGEDRYFQAT WSRTTSAPNQ
 CNNRTDVPAG GYLLHTTVGN NPSPAVTFNL T

> aaRXA02678 (1-918, translated) 306 residues

MRMAKTKKN EQLPEGMSRR QAKLAARAAE RAALEREPRP FEGLAMESQL VALQEFIPSA
 TAPITVAGTD RKITLCTVLP GAAAALVREE AFGGEAFVAM QQAIRSNPNS KDALAFALNWV
 INAKAGESLA TATADGTQPE LKSLNDADT LEITTHQDFN WWLAENDNLS PEVAQHMQA
 NDSILPSHEV EADVPGAVWW VNPGGKAHIR WVRTENETAL FNALARIAAR GELNLGEETK
 FAGAFRTHGI VVPVWDLDE RPSTDYADVL VALNEKIVAE LDNDAQNLAD ERRQLENIKS
 RQVTIR

> aaRXA02679 (1-426, translated) 142 residues

VAPSSGDDTV DVGTCRTLLV SELNVDLWAT DLEVDVAVAGG GVVLGAGPV DVGVIQGFAD
 GIEFSFGGFL IGEANPVCDD IDEQFFLLIG EVRAFQAGAG WVVARAARCA HHGIQLFTLV
 ELCLLLFGEA VVEGEGGFVH VA

> aaRXA02680 (1-1284, translated) 428 residues
MRLNKRPLPAA LSGLLLSAAL LAGCSTSGTA ETTTTTVSSA AASTTTSTSS ASSSSSSSSSS
SSSSSDSSTTA ETISNTAEAA QAFLSTLSTE EQDAVLYDYD AEEKSTGWSN FPVTFVQRSG
VNLTDLTEEQ QAAALNVLKN LLNDDAYQMI EDIMASDQYL NDESNTTEDS LGQYYIAFFG
DPSSSDSDWSI QFGGHHIGIN TTFSDGAITF APTHLGTQPS EWTNEDGETV AALSNMYETA
FAFYDSLAEQ QQAQLYQGEE LDSMVCAPGS TCDYPTGTGL KGSDDLDEQK ELLIDVIANW
VGLADEETTE TELDAIRETL DDTYINWSGA TEYDTSTGDG IYFQISGPKV YIEFANQQGS
AGADIDGVIT AGWGHHTIY RDPTNDYANS VTQEAASGMM GGGPGGNGGE MPSGDMPTEG
MPSGAPSN

> aaRXA02681 (1-444, translated) 148 residues
VGWGEDGTV GEGGVDADV SAELDGPVGV AAWIAEEDV VLAEGILGGV AFVVEVLIA
HDVFDHLVG VVEQVLQHV GSCLLFLSEV GEVHAGTLHE GDWEVRPAGG LFFGVVVVEY
GVLFEGGQGG QESLGSFRGV GDGFGGGA

> aaRXA02683 (1-678, translated) 226 residues
MTLLENSSGD PGSDSGGARY SLNSLKVSEQ AAANAVLKAV LNDVSYQEFA DSSYLEITGT
PSADGTWGIS FGGPSESASV EFSGGSISFS PVDMTVPATR LPQMGAFFYET LTEEQLGMLE
TGLAVSTVDS SQEMLLDLV SNSIGLADTE TTATAISKIR ATLSETYLFQ TPDGLTLALS
GPHVDFFVSH QGSTAKITYR DPSTDILTAE DRVDTASVAA APPEVV

> aaRXA02685 (1-657, translated) 219 residues
MSGLRSILRL IDLLAPVAL NDQQVALNAS MANSAWLDLT LQLCSAGVLF SWGALAIYLL
GERFQWIKPK DWAAGAGLAA LIGIPGLIFY ASAVHLGLSK QVPTTLETW WEIPVLLIWS
AANAFGEIIV VVMWFFTRLR QLKWSVPAVI VTSSVLRGSY HLYQGISAGL GNIIMGVAF
YFYHRTGKIW PLVIAHFLID AVAFVGYSAI GGNLSWLGL

> aaRXA02688 (1-669, translated) 223 residues
MAGRIILLRH GQTHNNVKHL LDTRPPGAEL TDLGRKQALE VGHELATYSG ERLAHVYSSI
VLRAQQTAVL ATSTFEKARD MQSGAIPLDV VEGIQEINVG DFEMRGDEEA HMNYSRALNG
WLHGDPAAGL PGGETYKDV NRYQPTLDRI MDSDLDLDDR DVAVVSHGAV IRIVATHATG
VDPNFAFNTRY LGNCRFVVLE PNGKKFSQWD VVRWTDSPPL WQE

> aaRXA02689 (1-342, translated) 114 residues
MIEVSDEFER ELVELAFDQV PQQFLDHMRN VVLLIEDFNP DSPYILGLYH GVALTERTFN
HGGLPDSITI YKGALQNYCN SEEQLVEQVR VTVLHEIGHY FGLGEEDLHR LGYA

> aaRXA02690 (1-1098, translated) 366 residues
MSTNFDSTST PEGETKKNSS FRTAASVQTM LVAALAATAA VGVYSYNTDN SANGGESPTG
PEQSTVSTTA TIASFTTADV GQCATWDVNN EGLVSGFEQT SCDQEHREFI SARENLATYP
SSEFGPDAA PNLTRQAQLR EELCQSPTLA YLNNRFDPSG RYTIAPILPP AEAWAAGDRT
MLCGLQATDA SGTPQLTVGP IAANDQARVF ETGACVKVES SAEFRQVDCT EDHLESILT
VNLGVFPFQG APSTDEQNNF LGNTCTQASI DYLGSEENVY QSTLQTFWPT ITSNSWLGG
HSVNCFLMSP STEGAATFNT LNSGATGTF INGEVPPPQP ERDPLRDTAG TTASAEVGV
VEENAP

> aaRXA02693 (1-1647, translated) 549 residues
MVSLPRLASL LTTRLATLKP ALKPATHLAS LGAQVIAELV PGIRMSPNRR RILPANMGAG
FIGAEIAMWW ALSPSLLPKP WWVTAANLAV LQAVGHAAAT GIHSILPRTN RRVSRKIYNA
THIATGAILT TTTVVGLIRH RTQIRLIGQK NFGPKETIAG ISVGTLYGGA LLITGELTQH
SINEVKLLIE RFLPPWISFI AAVSVITLTT LTLADRVLLR RILHNSAIQA AHLNRMVFP
TEQPWEPEPERS GSPWSYKWK AVGSQGRAVL SGGPRKDDII TVTRLSDETET HEPIRFIGM
VPGRLSDQV DLVIHEMRRT GALRRDHIVI NNSTGTGWIT DWSAHTFEFL TGGNCVTISM
QYSYLPALS WYKDNDGPI AARMLIDAVL HELDQLPTGS RPKLFLAGES LGAYGLAEVW
GDVEKLLGTA DGVLLSGAPR FSDAMNALRT RRDASSERL PVIDSGRHIR FAGEPEHLDM
PATWQFPRMI VAQHASDPIV WNAELFIRR PEWLKTPKQD HQDVFNRLRW MPFVAGWQVA
LDLFTSTSV

> aaRXA02696 (1-456, translated) 152 residues
MSMLKKTKEF FGLAPYEAH EDAYYADEPR YEGTAAYAPE YRERDYGAP EAPAPVAPSP
APRSYQSTIV PVELHSFEDA QVIGGAFRDG DAVVFDMSLL SREEARRIVD FAAGLCFALR

GKMQKIDSVT FAVVPELSNI STSELERAAIR IR

> aaRXA02697 (1-699, translated) 233 residues

PFVWVIGMH FAGFLATKKG KDSPTLKQQV PAFFATGAAG VAVTGVVSA ITWASGASWG
WISEISGNSK VINPLAFPSL VASVITMVAE VFVDDFDYNA VVNVVRSISM LIMLGGLVVC
WWLFRQNER AVTGTAAAYA VAFVNSVTL PWYYASLISL LGTFKPPMWL IRFAAGASVF
IALMFTGSGN HQLYNIVTVI IAAIIAWLAT VVIFDDTDP A TTATEKPSPH TVS

> aaRXA02700 (1-1236, translated) 412 residues

VVPSLQQWRK PALILAILTV LGVLLTHWFA WPLTWPLGLR LPVDVEVYWQ GAREFWLADD
LYDIRYDTTF DNLPTTYPF GALVFTPLWW IHDLFGLLVT ERVFALITLL TTYAVAVFLL
RLAGVRDRVW EFVAFALLV SAPVYFTLNI GQINVMLMAL TLFVALPRS TRHSGVLKYV
PLGVLTGIAA AIKLTPLVFG LYFLILWVVT KSPRGLFGMI GGFLGASGLA IIFRPSISIQ
YFTDVLFTAE RIGDLHFARN VSIRAVLERL PELGSAASIM WLVAVALVII AVAVAAAYRIL
RTDLSAHNRL LAVSLVSLVA LLCSPVSWYH HWVWLGPLIV ALWLTQHRWL ALWGAFVATF
GSFHNFLPSE NMELTWPWW MHVLAHYLI FSAVVTAVFS CGKMPQKTEL SH

> aaRXA02701 (1-1308, translated) 436 residues

LTNPQTAHAA ASDSASQKEA PNPSLSITVG IKDLLGLLSV LGIAAGLIAN KILIERYNWR
IDAAVYREGA LALVNGESLY AQPFDMDIS LPFIYPPIGA ILFAPWGYFD FITVELAGNL
VVIGSSLLLL LCLYLVTNAV LSGRDKLLAF TIAAISWPIA LFAEPVFLNA DLGQINILIM
ALVMDLLPI KRRIPRGVLI GLAAAIKITP LAMLLYFLVK KDFRGIINAV ISLLAFTAIG
AVLAWENTKE FFSSTLLNLS AEGDSGVDTT FQSNSSIQAM LYRWWTSKAD AEASSLPTIL
WIVLSLIAVA AVAYLMHQLF SRGLHVEAVM VNAMLMLLIS PISWSSHVVW LPLWAVVFFV
RYRQHRSHPK FLLWSGVLS VMLMLPPKW WFGRDGVNVF ELNFWEKLLI SDWTWLSIGL
MITLGLGLKA FPKISK

> aaRXA02712 (1-795, translated) 265 residues

MTMTNGSRTE SGKIRDRVA DADPRYGRV SVSRDFSTAE ASGRGASIST QPRRDMAPER
RHTTRALVNP GVQPTRKRLM QHKLGSQQVM SVRGRRVEAK RADPKVIQLS VLVVILLCVG
VGATMGLSGT STQQTFLQLE LQATETLSN RIESLNRDVE DARSATLAA NATEMGLVSP
VEPGVLAVQE NGDVVEEERA NPETRPVDI NGQOTRPNRA SSNPDETNAV TENLQAIPOE
AAAPPYQNT VPYAATTGQA GGAGQ

> aaRXA02714 (1-429, translated) 143 residues

MFLGTYTPKL DDKGRLTLPA KFREDLAGGL MVTKGQDHS AVYPKEEFAA RARKAAVSR
TNPEARAFIR NLAASADEQR PDGQGRITLS AAHRTYAGLT KECVVIGSVD FLEIWDQAQW
AAYQEETEA FSAEDDVLG GLL

> aaRXA02715 (1-390, translated) 130 residues

VSLSEQEQA LREIEQALMA DDPKFGKAVA SNNLAGGGF TLRGIALFVL GLVLLVAGVA
LSQQTWLFVA LGIIGFLVMF GSGVWMLRGG GSNKISVTSR TSNAKNRQQG NSTIGDKMEE
NFRRRFEGNK

> aaRXA02719 (1-648, translated) 216 residues

MTLFQRLTNP VVLGGLAGVL LLLGSFGGGA IRYRGGVLD LGLNFLAFGH AQQISNTVLW
VGQLLLIGAW VHLGRRLFKK KVADDTADAA DLGLVKRTLY AMVPLIFAA PMMSRDVYSY
LMQGAMLRDG FDPYTEGA AV NPGPMLLEVS HDWRNTTTPY GPLHLWIGDM ITTVVGDVNT
LGVVAYKILS IIGLAVTGWS IVRIAQHFGA NPAIAL

> aaRXA02720 (1-627, translated) 209 residues

LERREELQVR LQQVQARIDA TLNEHNRPEG SVRLLPVTKF HPVEDIKILQ EFGVTAVGEN
REQEAKAL ELPDMDFHMI GQIQSKKANS IARWAAVHS VDSEKIAEAL GRGVALALDR
GDRSDELPC FIQLSLDGDG SRGGTPLSQV TQLADCISDT THLRFEGLMC VPPLGWGPEK
AFSQARDVLS GLEEHFDRSL EFSAGMSGD

> aaRXA02721 (1-738, translated) 246 residues

MDSLDPNRNP VRKVFTTRAG GVSQSPYASF NLGDHVGDDP QAVASNRNRL ADIIGLSPDK
VVYMEQIHNS TVTVIDEAPA DGQAVEATDA LVTTQRGLAL AVLADCVPV LLSDTDAGVI
AAVHAGRMGA RRGIVAKTIA KMEELGAKPS RIHALMGAAA SGANYEVPEA MARDVEAKLP
GSIARTTKGT TGLDIRAGLL RQMLSLGVQM IDS DPRCTIE DEDLFSYRRE GTTGRQAGV

WLPKEA

> aaRXA02725 (1-612, translated) 204 residues
MDNFEHSNAS IRLQAALAAG TAEDTTAIDI LLYRSGVEED FFVRDMITWA LTRMPVDDVF
TSLVADLDSE VPDRPFGASQ ALHTLSKLRV AQSWEQLQAR PWLLHREDTA QTAWRTFVGL
VPDDQTAWLA HQLLQELDKG TPEIQRSLSR AMAELEGREA SISVLLGALT SAHAVATAKL
IADPDSDFMA DLEEARRVDN MGAC

> aaRXA02727 (1-912, translated) 304 residues
VVLLPLLVPQ LQVQPQLQLP SLLTRQRCAR KSKRSCAPNT ASKLDDASKA AQKAQNDAKS
AQDQLQRAQA DAKAARDEAE KAKAEAKSAA SSSTTKAAAV GAVGAGTGAA VATGAANVDT
HMQAQKVLGL AQEMADRLTS EARSESKSML DEAREAAEKQ IEEANSTSNR TLEDARANA
KQIAEAQNRA DTLVNEADAK AKNLVSEAEK KSAATLAASST SRAEAQIRQA EDKANALQAD
AERKHTETMA AVKEQQNALE TRIAELQTFE REYRTRLKSL LEGQLEELHA RGSSAPTNNK
PSGE

> aaRXA02734 (1-384, translated) 128 residues
MRIAVTGATG SLGGHVVDL LNKGVAAADI VAIVRNEEKA ADLKARGIAL GVATFEDETA
LTAALGVDR LVFISGSEVG QRVAQHTNVI NAAKATGVTF IAYTSLNLG PQSLHLLQST
LQPEKLLA

> aaRXA02735 (1-705, translated) 235 residues
MVDVVRARDT EDLVAQAASK FIEVVEAATA NNGTAQVLT GGGAGIKLLE KLSVDAADLA
WDRIHVFFGD ERNVFVSDSE SNEGQAREAL LSKVSIPEAN IHGYGLGDVD LAEAARAYEA
VLDEFAPNGF DLHLLGMGGE GHINSLFPHT DAVKESSAKV IAVFDSPPKP SERATLTLP
VHSAKRVLL VSGAEKAEAA AAIVNGEPAV EWPAAGATGS EETVLFLADD AAGNL

> aaRXA02736 (1-957, translated) 319 residues
MIFELPDTT QQISKTLTRL RESGTQVTTG RVLTLIVTD SESDVAAVTE STNEASREHP
SRVILVVG D KTAENKVDAE VRIGGDAGAS EMIIMHLNGP VADKLQYVVT PLLLPDTPIV
AWWPGESPKN PSQDPIGRIA QRRITDALYD RDDALEDRVE NYHPGDTDMT WARLTQWRGL
VASSLDHPPH SEITSVRLTG ASGSTVDLA AGWLARRLKV PVIREVTDAP TVPTDEFGTP
LLAIQRLEIV RTTGSIIITI YDAHTLQVEM PESGNAPSLV AIGRRSESDC LSEELRHMDP
DLGYQHALLSG LSSVKLETV

> aaRXA02744 (1-804, translated) 268 residues
MSKPFENSAL RGSSRFPGT FTPAPKRATP AKMLAAQGM ESLLFLRHGE QQLLSIIPL
VALIALANFD FIPGENSLDK TFPFALATA MSAGFTGQAI SLAFDRRYGA LKRTGASGVP
AWTIIIFGVI AVIAVTIVQI IFLGVTALLL GWSAPVGGVL FGIVTLFVGV SSFTALGMLM
GGTLLSELVL ALANLIWIVL SGLAAWAVFS PSVNAEGVLS IIPSVALSQG MVDAFNGELP
WLQGLILVGV LIITGVAANK LFNFSASR

> aaRXA02751 (1-474, translated) 158 residues
VLPIASGND RNLIRYVDGG RFDEIMLTGD LTGLSSFLT AGPNARDDFD LTVLMRAAEA
GNLMVVARLL DLGANPRLTN PRGVTALHIA AIAGDDGIVE CLIDAGAEVD AVDDQGRTP
WNAAHHLPD SAVVDVLLRA GANVNLRDCN GVSPEDML

> aaRXA02753 (1-2493, translated) 831 residues
MLDSLKNRFT KAKGSHGVGE GAVSGDAVK PLRKEERLAS VIQETEPGAA VEVMMRRNDAF
ALPGETGWV MLLPTHDSQF GGLNAKEKNR EDKGTIINLV VNDDIHSVVT PELLDSVLG
VIPDADSFDR MDEFDLLRNK ARWHYGVA AI EPDTGELVVF KVPKNSASA RGDIFSEVGD
VLSGAADLED VVDFEVIATF LEVLNETSEV DIDDEDGDVP YGLEGVNAAG VITDDLIREK
LDVDSYPSSA EIIDNIVHVF TKLQGHVVA PQPVLHSA DVVDAQESH TVVIESPDDV
ALAEQVDPD FSDGFGIDDA EVTEPEDEEV VEATADADPF GDVAEDDPFG SDDEPDFGAS
DVVAAPAPVA GMSDEQIQAL IRGVSESVQA KTGSELNALR EELAQAALAYN PVQDSQAALA
QVHAADARSF DADQVGDAVT KRYVNDDLGL YVDEANFNNA LTRAPFQVAM PQFQETTPWL
GDQLRTLAV FNGQLLDQH RYEEVVRAM IALNDRSNLE IARDLGLDNK DSEFYEVYRA
IERDRDMAG DQQRVESERR QQLQQEYEAN REEYVMKIA EQRVEYDRR MPRHTASLEA
VGRELTSLRD RTIEDYTARM NTLRRARAGE RANAAESRII DELRPIVERQ AELQRAAFDG
FIVDLDFIA DHREDDLRLA SVNEQKLAAD NRVAQLTKEA EERIEGIRVE TDKMIASQRK
ALERQEAFA AELKRRDTIV AASEERAERE ITTARLDAEA ALKRMEEQIR VNNEAHEAEI

VIERDRATQA EANSMTFVES VKQQDRSNNI ILIAVLIVGL IAGMVAGAAF F

> aaRXA02756 (1-891, translated) 297 residues
 MTSPYGSQYP GDDNNWNNSQ FGNPSGEQNY GQPYGAPYQ PYGQPFQGF NAYSSPIPE
 VPQPSMQEAG WRSFDLGTVF QQAWKGFTAT WQAWVLSALI YFAVLLVLMF AWILPMVSVL
 AATSSGSDSA AIAATGGTSF FGFMIMIVLA FISFVYSLNC YRNAARVVRG EQITIQSFFK
 MKGLGKALGI YILINIVIFI GMILLIPGI IAAVVLIFAV PVAFQLRDAS IGDAFSASWK
 AVSKNVGQVI LLELAIFALS FLGSAVIIGM LVTTPLTFLL YAYAFQTASG GPIMQRQ

> aaRXA02757 (1-546, translated) 182 residues
 VVKLCLDERV STDPDFRAAL ERWYGHILRK VSRARNAAW DRVQDLPGVT VEDDAKVRA
 FLPSAVVDVP ADIKKLQISG TELPLDEPNP INDEYPIYI DESLKMTLGK AAAQVGHASM
 LLAHQPFWE VEQWEADFA LHVREIPSEE FLRLIESPGA VPRDGGFTE VAPNTVTVVA
 IP

> aaRXA02765 (1-759, translated) 253 residues
 MSNQLPDHVR DAFQVGAGPA EQLGQAWDFG FRVGNTVFAK VTAPEVSGWS SKTRETLPKE
 GVRVVRPIRS TDGRFVVAGW RASVFSTGTI SKRVDETIVA GLRLADALVD THAPEPVDNV
 FNRADVQAW EQPGRIGELL EPINRVNQVG HADMLATTLY AGTQPPAVTD LVPVLRPHGF
 TAALVIVDGL LLGAVDEGIL RRFSLPEIE QLVLRFLFR RNLQEFSENN DPNVISNLNR
 VESTLVSYVS DK

> aaRXA02766 (1-393, translated) 131 residues
 MTTSENFYDS VGGEETFSLI VHRFYEQVNP DDILGPMYPP DDFEGAEQRL KMFLSQYWGG
 PKDYQEQRGH PRLMRHVNY PIGVTAAERW LQLMSNALDG VDLTAEQREA IWEHVMRAAD
 MLINSNPDPH A

> aaRXA02770 (1-1320, translated) 440 residues
 GINRQVIYTI NEDATYSDGQ PVVCDDFLS ATAGQMPLEF QSHVPLTSQI ERVDCVSGSK
 VATVVFKEGL GERWRYLFEQ GDLLPAHAVA SKAGMTLEEL NQALKDKDPE ALTEPARVWS
 EGFQLSQFDP ELQTAFGPYK VDSVGEFGEV KLVRNEFYSG DQAVEAEITM WPKGSDLSAI
 ADNGNLQIAH VVAWESEPV NRDDPLNPYD IKEEVGVLTE QLTLASAGVF YAAEARQAF
 ACVDQEAFAV ASSISGIDV PAVGVHVRH QNPVVHQIGD LPAQHMAVDI NAASALAGQS
 IRIGYDGPDE RKAAMVEAIR QSCEPAGITV IDASQEAVAL NDLRTEVSE WGYEQYFEGT
 LDAVLRTPVP HREYENANTI GTDAESTRRT EEQLWAEVPS IPLAAQPRVF VIDRTVGNV
 VNTDLAIGW NMDRWSRSEE

> aaRXA02774 (1-471, translated) 157 residues
 PCPPTQKLLY AQMREIAAEL TACDATRGLH AEVAAEWLSD AITGEPTSIE IDPHRNLFYA
 LNVEHPRLHE LFAGYATRLD ELDRAPQOCE SRQYFLDYVC ADNPFQSDKP EGIIVLLADH
 VLAADPVTNK PALKSEAFPT VTDYCRTHSA KPTDILI

> aaRXA02775 (1-225, translated) 75 residues
 MTTVQVSTR VREHRTVPV DYAVGATISE IYAACAMAEK KANNLGLNTT KDDWARVTVT
 DNAVVFIVEN VIGNT

> aaRXA02776 (1-342, translated) 114 residues
 VLYPVEAGTV SLVDVKKAA RAFEQWEKHN ESAGDVGDDL SLQSIVDLIE RDFTPTDDEQ
 ELNNVALLIG ELLVREAGGE WTSYISKND EDESLEIFGV FGTGGTEGLS VVGN

> aaRXA02777 (1-1107, translated) 369 residues
 MNRPLQSQNF SITSEWANAT FNDIEDSLEG SFDIEPGQYI GRGEYFVATS GTGSKKFIKV
 VLGDGIDSEL NRRIEGEILA SSLHLPSTDL ISPVVIQYVK ESSNFPDGFY IVSDFKDDTE
 TLELSKASLP LTDLAKIGAF LFRLESVTVP PQNPARRAMD VLDGLSLLAN KGNIETGAQL
 TKGTIQALEI INQEATNIEN ALEKVTKVG RKFESHGDLK FSQFLINGET GKIFLCDWEE
 CGSAHFANDL CFLAGDLFYS TIRELVDNI KNIKSSIIQ EAYDNATLEA VSKVNAILTG
 YSSERGYSLT SDEKRIISIR IGLAGLFRLY TVSAKSNELR PRELALASIG MQITLGQAPN
 LVFTDSKVV

> aaRXA02778 (1-225, translated) 75 residues
 MQVIETLDPD QRAAVLAAAI PREAKILGRK VTLRPGWGNM RVHVIVAVIF IKFLQPDLRQ

ALLTTGDAVL VEDDT

> aaRXA02779 (1-279, translated) 93 residues
MGEYFQVVQN IAMTLGAGES VDLVVREYIN DVEGNPTIYH GMPLRTEYRA FIDLDHCDPS
AGEPEPRLLG VTPYWHPSVM EKALRLCFKR CWC

> aaRXA02780 (1-327, translated) 109 residues
MSKFHTHRDD VISRITALLP QLRAQELQGG WSVDIMKNGE DFYLIIDMALM CESALSELLT
VTDEYATVEP SVINDFANQL VIDYDEHDMG FDRDFPAGVY NTRQASAIN

> aaRXA02781 (1-1191, translated) 397 residues
VVAALVFGFL LPTWERGLSD AALKFVFEGG PDAAREVLGT IAASTISVTG LIFSITLVVL
QLVSSQFSPR MLNGFLRNRI VQATLAMFLG TFVFSLTIVR YVWSEDEDIT GFVPRASVSV
AFLVLGCLG LFLAFIRLIT FSMRVANAIS EIGEETMALA ARIYPVQSDD AGPVQGPWS
PRPGDPREEI RVGNHGSVLW IDYRKLVSWS TEHQAVITVD RPVGDFLVEG QPLLRLVWWDG
ELSDRRRVL HSAIEVRTER ELHQDVAFGL RQLVDIADRA LSPGINDPAT AAQCVQEIHR
IFRYLTVIE PSPYIADDDG RVRVHQPQR IADMLYEVR EIHLYGADSA MIPRLRLTMV
EDLVTAADH SLPAYERARG ILDDETDEDR DSDTANV

> aaRXA02782 (1-672, translated) 224 residues
VAPALNDLAT THPKLAEQIA DPQPSGVSA AIIPTISRGH HTQLTWQCSK NHDHQWVATV
KDRVRGTDCP TCANTGTSRK EAELEIVIRA LFPNTDVQQG ALINGRTGNQ GASPSTDVLI
PSKNLAIEFN GLYWHSELF I KDKHYHANKS ALAEQAGVQL IHVWEDDWNL RRDIVIRMIA
HKLHATHNLS AVLPTETDS RVATTAFVH SHCRWSLVHA LLHS

> aaRXA02783 (1-549, translated) 183 residues
VVSGSRAAF LNSNHIQGA SATKHFAICD NNDDIRALLS VRSPKNNARM YRKKGTWEIQ
RYATLGNVPG GFTRLLKFAE HTLNEHSTVL KQWISFSAAD VSDGSLYRTA GFTAEQQ LAP
DYRYVGGATG WRRTPKESFQ RKRFRDDPAL LWNESWTEHE AALNNELYRI YDAGKTRWVK
NVA

> aaRXA02784 (1-186, translated) 62 residues
VAFAGYYQE MAEVCCEARE EGITHEDTLH MLNDMMAMKR SGEVLNTLAD VLYANECPEY
RI

> aaRXA02786 (1-807, translated) 269 residues
ILRNLGQSLG SLHAATADRE EDFNILLNRM LAKYPATAEM QKNRDRLLPA AIEVGKKILV
DAGVTVPVV EEFARVARRR LISGRHRAFT PFDLSPDNII VAERTHFLDY EVAGFRDATE
DVACVIAGFP QFVFSRPISD DEVDELIESW VQEVIRGIWPN VNNEERLQAR IVTALIGWAL
SSVAFMKLGS ISGMLNLLHV TEDGNTTLDV SNLDELLIPR SAEDDELVQQ DLHDTFSALQ
RFAARGLDSR FPEYARFADD VVRLFLKND

> aaRXA02789 (1-546, translated) 182 residues
MKVSADTPGH DDPGPGRRLG LDVGTVRIGV AASDRDAKLA MPVETVPRET GFKGPD LADI
DRLVAIVEEY NAVEVIVGLP TDLQNGSAS VKHAKIEAFR VRRRLTNAGK NIPVRLGDER
LTTVVATQAL RASGVSEKAG RKVIDQAAV EILQTWLDAR TRALEPQSTD TQDFDEKGNF
PG

> aaRXA02793 (1-702, translated) 234 residues
MKSAAVPTLD ALGVLDRVVT KAGAFPAGYY DADLSERVTD IPTLSNKIDA SGHVLISKEV
VVAANPDIVF GETDTINRAS MASSNIPVVE EPAFCGSIDG DVSFDDVWSQ ISTYGTIFDR
STEADAYIAT LKERVSEVSS RVTDSGKTVA VLYPTIGGGV TYAYGRGSMA NPLVAEAGLT
NVFADQSERV FEVTAEELIS ETPTHHRFTQ RRFPRHRRR GGQSPRVQRT HCSE

> aaRXA02796 (1-549, translated) 183 residues
MRLFASITPP IEVTEHLINA LRPYKDDLRLW SDPDNWHITL AFYGELPDGA VEDLIEHLTS
AARINEEFTI RIKGAGSFNR KNLWMGVGGD TKDLRRLMAD CLIDPEERRR QRAHLTVAKP
TQRQSRDWD PVIPDLVHAL SIYEGPEWPV DEIELVSSEP GKGRSGGPPLY TTVATIALSS
ALV

> aaRXA02798 (1-1425, translated) 475 residues

MRSVLVDYWM TLAPSTNAVS QQTRRNPSQA PRLHLRLHFF AGIICAPLIF IAALTGLVYA
 FSPTIESISN QEMLTVSKSA SDTALPVREQ VSIAQELHPD LDLSGVRLGD DSSTTRVLFA
 DETLAESTVR AVFVDPYTGE ITGDTTQYGS SAALPFRQWV SQGHRMLWLW EPGRIFYSELA
 ASWLGVLAVG GFALLWLRNK KPGRLRKMVR TGGRGRVKTY RRHAALGTVA GLGFVFLTFT
 GLTWSTYAGS NITDLRTQLN WTQPSVNASL TAAPQVDMHD EHAGHHMHME SATSGSGSID
 LVAATAISEL RTPLTITPPA QDGLAWTATE NRDAYRFTTD TIAVDGDTGM LTNRLNSTDW
 PLAAQASAWL IQLHMGTLFG LPNQVVLGGL AASIIVMIGL GYWMLWQHRP REGWPSAPKR
 AGFEKPTWGT IALGVVVIAY GLLAPLFAVS LLVFIGLSLG VRFISRMGR ADTSN

> aaRXA02799 (1-273, translated) 91 residues
 VARNIEDIQR DIERTRRQLA STLDELADRS KPSNLVDDAK NQATAKLQES NVQKVLLGVA
 AVVVGAVVFS VVRGRKKAND LKEIQRLLE R

> aaRXA02812 (1-567, translated) 189 residues
 ASGTDASTIT LDQVALPVAT NSGASAAVAL ALAETPEAAA AALNRDADVT ATGAADSPAF
 ATVEGAELPE GYTFEAVDSA EVPVWAVAIN AGNGISEDQA RAASDFSSFS FDTGNADNSA
 LESVLTQASS ESAAETTEAQ PSETPVEPAA ASPSDTIINL DTSSNMDRVV DGSQETYHTV
 TSRTLANLA

> aaRXA02815 (1-552, translated) 184 residues
 WLRSTKEFED QPVIAPFEVI ATVASEFAGD DGNYSNEFPV EDLVGYVDAI TEAGGYAVLD
 LQPGRANFLD QAKMYEELLK RPNVGLALDP EWKIGPDEQP MTRVGSADAA EINEVSQWLA
 DLTAENDLPQ KAFVLHQFQL EMLTNRDQIN TDHLELAVVL HADGHGNAGD KYATWNMLRE
 GLSP

> aaRXA02817 (1-399, translated) 133 residues
 MILGVPIQYL LYSLWNWIVD TGFDVAILLV LAFLIPRIGR LAMRIKRRV ESAADADTTK
 NQLAFAGVGV YIAQIVAFFM LAVSAMQAFG FSLAGAAIPA TIASAAIGLG AQSIVADFLA
 GFFILTEKQF GVG

> aaRXA02818 (1-606, translated) 202 residues
 SYSRKFLTQV WIRDNVGDYK GLTDTAFRKK LQRDLAYLRR VGVPIEQFTV TSGIAEGQQA
 YRLAQDSYKL PEVEFTPDEA AVLGMAGEMG HNQELGAFAR SGWTKLAAGG AQRDLSTSTA
 LTNAGDLGSL SAKTLDAIIK ARQLGKQISF EYRRAPKDAP SLRHMDPWGL VPERDRIYLV
 GFDLDRQEAR TFRITVRNI KL

> aaRXA02823 (1-270, translated) 90 residues
 MTVRNPDREA IRHGKITTEA LRERPAYPTW AMKLTMAITG LMFGGFVLVH MIGNLKIFMP
 DYAADSAHPG EAQVDVYGEF LREIGSPILP

> aaRXA02824 (1-528, translated) 176 residues
 FYETGEALDP TGDSLTISS TAPSTSTTS TSASTSGGTA DCSSGALGVV TTGTNDGMLG
 TIQEVNNTFA IWNNLIVNTE RMFCNIDTLK ARFDTDDSSD SATSATSGTT ASTGTTAATT
 AGTTGTTGTA STASGTSCTS GTSGTAATVA GTTPTDNGVC TASGSLGVTQ ASAQWG

> aaRXA02825 (1-384, translated) 128 residues
 NVSATEASGS ASVSLSQSGS QAFADFYTPG TQLDPISFSA TLGGDASCAT GSTSTTGAAA
 TANTDNTEGV AGEESTTPAN QNSQFQIRQA AADSTGLDTT TTMLLILAAF VVAGGSMTRF
 TVGNPTGK

> aaRXA02827 (1-423, translated) 141 residues
 MYEQQKILNE VSEKRLQAIK DFTELGSFGK IAMRDLISIRG AGNLLGAQQH GFIDAVGFDM
 YSQMLSEAVX RKQGKNSQVE KXXVEIDXGV DAYLPETYVA DXRQKIEIYK RIRELDSQEM
 LDELEDDLDD RFGEXPEEVA H

> aaRXA02838 (1-462, translated) 154 residues
 TVPLGDGQGR YIAKIPSTAF VGVSENKFN LALAEIGME VPARELVGRA QFEGVPPEFE
 AMTDGLVLLV RRFDRAGDV RVHMEDFAQV FGLYPARKYD GAASHDIAAV LGSASVIAAG
 LEFVRRLLALS VVMGNGDMHL KNWSLIYHGR GDVP

> aaRXA02840 (1-150, translated) 50 residues

MTVISGALNV LLPDATDWQV YEAGSVFNVP GHSEFHLQVA EPTSYLCRYL

> aaRXA02841 (1-279, translated) 93 residues
MFAAFKSNLP TIKKLVEVI NGVDAALNEL ERHVTNESVR ARELPNVQYK ATAGRNFAIS
KLVQNLRRIN KAQNNPRGVP THATVILLKG DGS

> aaRXA02842 (1-342, translated) 114 residues
DAGFVYFGEI DDAGHIFGLA GDEYRGGIRR VDTLVKKVLS EVSRRSDELG EDWLTVITTD
HGHLDEGGHG GTTDRERESW IITWSPHREL PQWPEEIAPX ELAELMLVER RTLR

> aaRXA02845 (1-615, translated) 205 residues
EDHTSMLTHF SAAVGMHHRD PARFPGQGDG SYPDLFWLYK NALNLVISSV LFTREQMDNM
LDQMDEHFTR AGIPRIAINI ERRDDALMNG SLERALELQE LIDASQHDDP FDDCPTCQIA
GKAALAMAAD DYDETQNLVS QIISYGSIGC VMEPETTLAA FMLRVLKSGD ADYARYLQDV
SAKANPEFQS LDSVGRHLEF LGITG

> aaRXA02846 (1-573, translated) 191 residues
VNGLSIINAV NNAWSVRKRT DWAKFRILAG ALVLGSVPAV AVVYFLNGPW LLIFVGAMVL
LALGVSLFPT EKFAKQAEK LPMVIFGMIG GFMSTVAGIA GPSLTVYARL SRWDYRDFVA
TLHPVLLVAN TVSFLKVL ILGLDFGGAP AWLWIGAVAM IFVGAWLGEI VNAKVSTPMA
KRIATLLAAA G

> aaRXA02847 (1-594, translated) 198 residues
MAVQGGFYLF AILLMAIIL IRRYRPEYSA VRLATPVLAV LTSVSFFSAI LWHFIDQSVN
YYSTFTREWE LGLGALLVLH APRILISAKT KSILAAVGLF MVLSTGFFMD GAETFPGFPA
LYPILGACLV ILGDGKISVF LSRKWWLWLG DIAYPLYLWH WPLLIIFTAL FNQEEPSIWL
GIAVIMLSLG LAQLTNKY

> aaRXA02848 (1-399, translated) 133 residues
MQIVLASQSP SRRRIINSAG VEPLIHPADV DEDALLHSLN GSAPEEIVRQ LALAKAQVVA
PSYPGDVVIG GDSMLLIDAT LQKPHPTREA TIERWKQQRG NKATLITGHA IIFGDEVIVE
SSSTNIHFAE ASD

> aaRXA02849 (1-282, translated) 94 residues
SPYPVMISTS ADASNVTVRI MGVDTSVES INNGRWSTTQ PNTVRVSGSD CVPSTGAPGF
TTSDTRIISD LSGNEITREP VTTVYDPSN VVCS

> aaRXA02856 (1-249, translated) 83 residues
LPHAKELAHE LCLLPTPAVP ALPTDSGAQF DIHQALSASL ATYARNLTLL SHTAENLGNR
ALTGLAEIED TDDQLAHAE RLT

> aaRXA02858 (1-1026, translated) 342 residues
PEWKKFNSGD AARVVPDANA ELDIIGAPAL LADRPSYANV KTLRIFAVM RSLGHVTAAS
PVTVFFSSH VLSNVDRGSE HYSGPNGLGE WTSVGRAVAT NWNGVVDALD EAITVKEVNS
LFTEDAATRI QEAQAAVQAA REAEEQIAKE EAEKVDPYDN SPWAAAGIDP IKVSIDGRTI
YTLRTYLGQ PVFLGKFGEI FTFNSQKSL RLVVEHDDHD LARASTWSDL MLGINAGETE
LLVHSDNVYS FNLVKDINT SVDAVDTQQM ARAYELMADT ADWADDDSMN SYFLANPRMQ
DYISYMLGGS DTSGYVPHAP FNDHSESWRE LEEMLIKRF KS

> aaRXA02862 (1-636, translated) 212 residues
MNTNLPNLYT AFDLDRSESS EALGVLSAR DLRLEQMGIA QDDPRRAQTV QAFVLADPA
KRATYDAQLE AGVPLTWAQI QHLGNFGTLP STPTAQPFPA PQPEPSPEPQ QQWNSGQNYA
YGNPTMDYQT QQSYNPMQDQ TQASMYAQPF ANTPAPMYS NQVFNRPTAG TRLWMAILDS
IFAGIAGGIV SGIFGFGSEF LTSVIMILVL IV

> aaRXA02867 (1-606, translated) 202 residues
MSATNPDALD VQHVYPIKTK KTPLAVIFNI ISGGLIGMAE LVPGISGGTV ALVLGIYERA
LHNGDLLIDL IKVLIKDRSK VKEAAAKIDW WFLGAIGVGM VVMVFSMSI LHTVVEDYPE
ITRGLFLGMV AVSILVPLGM MDMRDAKKRL AIVIPLFIIC AMLGFFGTST TSAPRTDPSL
IFVFICAAIA VCALVLPVQV DH

> aaRXA02874 (1-480, translated) 160 residues
 TELNRDTHHL WVVLTDSDD FDADSFTEV IRITGYSRHE VNNGLNMAAA MTNLPHLRAI
 QERYYFLSIR YLASIMIAVA KADPTLWEEL DLRITDALTP VTAGEVMIQS STLSKXHRXP
 GSKNSTPNPH QSPHRKRTMF TSTPLMRRPM SASKSAAPTA

> aaRXA02876 (1-663, translated) 221 residues
 MTSDKDTEQL EAAGTEILMP RRRPAQQRSR ERFNRILTAA RSVLVDLGFE SFTFDEVAKR
 AEVPIGTLYQ FFANKYVLIC ELDRVDTAEA VAELKKFSDQ VPALQWPDIL DEFIEHLARL
 WRDDPSRRRAV WHAIQSTPAT RATAAATEKE MLEIIAEVMR PLARGAGYEE RMSLAGLLVH
 TVSSLLNYAV RDVNSSEEDF DSIVEEIKRM LISYLFVSAT G

> aaRXA02881 (1-666, translated) 222 residues
 VKKKLMLPLI VAALGLSACS SEPAAAPLEA EPLHNLLIDG SESGLDNATE GNDTSLSGQP
 INLTVVNGAL DIDGSCGKAL QAVEDVNLDS VASASRALAS GDKQVGIAMY STAEDNDISP
 MDLYADIANA CEDPVVDSSD TTYTFGKLDD APDGAVGFTL DIEVTPDNQG STVMMIQELG
 NHHIIVAGLE TTPEETATVF EAQRTKLEEG LQLKQNWQLG WV

> aaRXA02884 (1-462, translated) 154 residues
 MLLTILWAIG ITAEGMTGAL AAGRQKMDLF GVSVIACVTA IGGGSIRDML LGHYPLVWVE
 KPLYLLLIIG AAILTVSISF LMEHFRVLFL VLDVGLSAF AVIGTQIALE MGYGFIIAVV
 ASVLTGVFVG VMRDLLCDRI PLVFQKELYA SIAF

> aaRXA02885 (1-1536, translated) 512 residues
 RGKGFHFTST EFAGSYSLVT NGLNDVAGEY VGVMRGDVNN SAVLFDVDRW SGHVVCADSS
 INTSPLLKRP RVVDMWGSKI SQAALLNNRR VVHLVLNGAK LDEMGPKELES MTAHVDMTSG
 DLNMFELFGK QEDELSTLYST HMDKIVFMTE QALGDKTSEL ALLRGKLKEI ITAFYVDMKM
 WALNAGENRD KLRLVGVPEH QIPLLSVFVS YLDQEYERQK YEGTKDPEMF RAISVRLRTY
 KDLLDTHGDL FNQHTADGID SVNSARRVIY DFSGVLRRGA GVAMAQLVNV IGFAVETLGO
 GDVVIHAGD GIVDQVQDY LANQFAYMAE RGGRVAYLYS SMDAMLGTVG FNQFQRAAYT
 ILGPMNVDSV DTYQSLINSQ IPMDLARLVT TQNSGASYLR RGSTNVVFET NLALGVNPPYM
 EQRRKIEAQR QRRSKRDKH YGGGTMTMVG ADLDVVAIQA KAEHREERFD EKSARKMKEL
 DDVEAKELAL KTGPKNLDDA LAQVEKKRLA KR

> aaRXA02888 (1-429, translated) 143 residues
 MYSDKLILLF LSEQDSSYEC CVGLLDGSDG RDYIEKLLKG RKLKNHFLEW EDINKADVAR
 EEIYKQQLVH LVFVTALSTP GEISFVFPQG SLMSATLEED FAALVLEER TSFRPELSHL
 WSLPVGWVAP GLEGFVERNS EAA

> aaRXA02892 (1-504, translated) 168 residues
 MEGPEAFTVA AIAAAAGVSP RTFHNYPSPR EDALVQFVVI RVQELTDQLY EFPTSVPPRD
 AIEQLVINQL RDGDDAMDSF SAMFRIGEIL ENLDPIKCVI DKERLIAPLL EFMVERDKDL
 DKFDAATLIH LHAAAIATSL HTFYQASEPR DIEDGVALIR RACAWIKK

> aaRXA02898 (1-1626, translated) 542 residues
 LVVDSSGRYN VTITGLTTTE TDSATALNLQ MSEAGYLERY TDGATVPSVM LSAADGTTPO
 ELVDALAAEL GSNFDVETGE ALVEQATGMI TQALSQVQYF LVAFGLIALL VGTFFIIANTF
 SMIVAQRMRE FALLRALGAA PGQITRSVVL EATIVGLFGS ALGVLGGMGL VAIISAVLNN
 LGMPMGSSVG LTPSAVVTAI VLGTVVTVIS AWAPARRAGE VKPVEAMRNM ETTTMRSMGM
 RTITGGIVLA LGIIFAIAGA MMTDSSTATR SILVGIGALF VIVGTFLFSP ALSMPVVGGL
 GKVIGAPFGS VGSLAATNSK RNPRRTATTA FALTGLIALV TAIGMLSATM KDAVSDMMAE
 QYTADYILQG PTNGSITMPK ESVDNRDAE GVADVVLVSM NSASVNGQAS YSQLGQSVTF
 VADGDLKSVI STESIDGSLD LSNPGVVTNQ TFADENGWAV GDTLQLESMG QTIGDIELIG
 TFTGNDAGN MIIESSLAD TPAADTAVPQ MMLVVGEEGF DKEQLRTNLE DAVADYIVIS
 VK

> aaRXA02899 (1-480, translated) 160 residues
 MNSGSTMRRI SLRNIGAHKV RLFLTVLAVV LGTSFVSGAM MFTNALSSTF DEAIASSFDG
 VDVVVSPNGA SEVQGVVET VESLREDSRI NHLNINGSQT VVLADADSKA IQTTGGSSLS
 IYYSADDAVA QAPELAEGEA PTGTEEVLAS KAGAEANGLE

> aaRXA02905 (1-474, translated) 158 residues

MDSVNVLLIG IIVAIAALLP RKGKYGPAT LLVAGDWLGV FLLSILVMLV FDGLEDLVQG
FLDSIWFGVI LLVTGIVSFV ATLVSKTDST RKLDGFLAPV KTPSWKTVGA GLILGIVQSA
TSVPFYAGLG YLSVGNFSPE IRYGGLVVYA TLALSLPI

>aaRXN00022 TRANSLATE of: rxn00022.seq check: 7277 from: 1 to: 1701
MSAPTIYPGKTSIDPITMDDARIIFDIESLHNIFTVATYDSLHHVDVIFYLLDHTTSP
QITVLPHSMDFDQTRSDAVMAAIEQNPAFAEIKGSPITTADVALHNLGDTNANRRWQS
NVLLARLLGGISVRGEVPEHQSHNHLAKQFAEATLVTRDFDVNYDPTSAHPFTAGFNSIN
YDTLLSLYFAMLTSNIGSTPTYFPVITAQELRAHNDKLFSPFIKNMPKYLWDRDSGAG
LRAASGFRNAMLKSGRHIDIQRLNEKQLFVGLKRLGLLGHQILESRLSGDDAHVDTNE
DVLDLIAYNVSDVVGTRLLAEDPVYSGSFDLRAGLLSTYPETVFDHGTFRQPSTQMRKD
RLTINTSSAQFAARILAPYRPLRDVPAIGDMPVVSILYPAADVAEATGQKQVNVLDESK
KFFYDNITDPEARAAAFDEVFAFYADIEGRNFNSHNEAIDTQINQLRAYLNQVVAFDAAGY
ALYDVRTRFEQIFPKDRSYINDATDMTPRAVSSFDDLVALCDDIRGVLDRGLEISSPNHH
EMVDAMRKQLHYIQAFYRAWDPTPLQ

>aaRXN00027 TRANSLATE of: rxn00027.seq check: 3923 from: 1 to: 366
VDESRFARSVPFDGEEPDRFTLANERTFLAWTRTSLAFLAGGIAFEAFQISGLSDTVR
TTIAVFIIAVGMIIAAGAAVRWMNVERAMRKQKPLVPPIIPFLSIAALVASAAVLVLII
VQ

>aaRXN00028 TRANSLATE of: rxn00028.seq check: 5847 from: 1 to: 1947
MTLTASSLEAGKMSFSGGYIVGETMIFLVDPEVEIRSPNSLHVLNRGSDILRRNEHC
WVFENFNKPIDPPVRLGPRDIICPSALAWVLQQHSISRSLSHHLHADKITAGEIAGRPT
ILREEPTSGGQDPSRLVSLIEDQEHGVILAVETGQERLEATEISFPDTLPNPSWDGAWEP
FHYPDSTPHAPDVAEIPGYIQSLPPQSEDPRRLRVFVNEIALEGDFPDYRQGSVRLTL
GISSSPVPLEGMTTRRRGRVRNLGEEASPGDDGMPQWPILLTGDGWTALAYTPIPKRGDA
EIQGWFFYSAYGIVDVPTDLRVERIFAGIGTSGTNERLWQEIDNTSSAYHSEDWWRDVG
LDVTLGAVPPPLRRDVFTAVDPIVAGDKLWLCVHFPVARCWETTTGRYLGQTLVPAPL
RDRSYVLELHSDQQLGAVAASGKSGWILTPGQAVATKAPDWTTPTRATDLPQVPSPWEIV
AVRGQGLFELQVETSRRTALGRVNATGGVDIGELPPNGYTISSVVQIGDEYIVGRWVEEY
RLNSKLEIVISTKELDISASGWKSKGTAVYLSEDTHICFFDQVSGAELPSLGIAEGHQGEV
MSATSSSESIVLIYRRNPNNMSIVPTSVAITYDNGTWTMTPLQEAPAEELS

>aaRXN00033 TRANSLATE of: rxn00033.seq check: 3319 from: 1 to: 1335
MSVQQSGLLERLGIPLIFGFIGLTIFMIGDGVETNILEPFLSSEHGFSVSLAGTLTV
YGVAVAIAAFFAAALSDLWGPRKVMILGASIWIVFELIFLTVALTDTHTLIFLAYGLRG
FGYPFFAYGLVWITATASPKQLGTGVGFYVAFSAGLPTLGALVATISMQYVNLTFYET
LWVSLVLVVIGSLIALLGVKERRGRHPLVANPDDVKQTLGQGFKLLNRDRRARFVYIIRT
INSIPTYAMAVFFPSFFTDDLKQLSWFLILTTVIYAVNLPFNPFSGSFGDRHGWARTVF
WGGSIGGAVTLALVYFIPMFGVQAGMSNGVVFGITIAAGALFGVSLAGFVPLSAIAVSLD
PKHPGAAMATYNLGVGGAVAGPLLVAVFHPLIGPTGLILVMIALYLLSGWMTLQLRGTO
PGFDGVPALAEADAHIEDLADVANA

>aaRXN00056 TRANSLATE of: rxn00056.seq check: 471 from: 1 to: 750
LLNRVSRIAGASAITLCIGLTITLSTPTAQSLAQITPLPESALDLNAEIHVNTSDISAE
QILGAQDEITMYDSHDPYEFDTLTDIEQRSIIAALKRDPSSLQQRQETRLAAQSDPYK
IYISGLEMLSCINLVDVVSFGIANQAATKANNEAVARYPGDSLNRNGKGDAPFRHCSWNA
TIRIGSNGAERIATNHETIGDGPADENAMDLFNNAQGRQIGAGFINSKDETSALAICALW
TNLGRKTLK

>aaRXN00067 TRANSLATE of: rxn00067.seq check: 5053 from: 1 to: 486
MVDAQRPKAGIFGSHTETWVWLGNELFDESGEVIADVRSDVLYVDRERLLIESTPGTMR
FRCRATLSGGEVYTMQNSFTVGDLTAVCGRRTYSLKRVSPWRKERLITNNGVEVARLRP
MTSGKVEFIVGTAGSEALPFVDAVFLSWACVLVDSAVRRPKI

>aaRXN00077 TRANSLATE of: rxn00077.seq check: 3953 from: 1 to: 1362
MNDENIQSSNYQPFPSFDDWKQIEVSLLDVISSRHFSDLKDDSTDRSALDAALERAKRAA
AVDTNAIEGIFQTDRTGFTHTVATQVGAWEQQMAMKGKHVKPAFDDTLEGFEYVLDVAVTGR
TPISQQWIRNLHAVILRSQESHEVFTAVGVQNALQKGEYKTPNSPQRSQSDGSVHAYAPV

EDTPAEMARFISELESKEFLAAEKVIAAYAHYAFVCIHPFADGNRVARALASVFLYKD
 PGVPLVIYQDQRDIYHALEAADKNNPLLLIRFFAERVTDITINSIIVDLTTPIAGKSGSA
 KLSDALRPTRVLPHELHDAHRLQESLFEIRSRLDEEGKRNGLEFLQRIFIGSPFNLPE
 GYNAFPDSYCLTLAFNSNSPKQIFHPLSIVIAARDGKRASSDLVAATSIGYNFHAYGREV
 EPVVTESFRERVKIYADGIVDHFTELAKKFQQN

>aaRXN00080 TRANSLATE of: rxn00080.seq check: 4040 from: 1 to: 1530
 MDILSLLMEGFAGALTPMNLLWVIVGCLLTAVGVMPGLGSSMAVALLLEMTFALDPTAA
 FIMFSGVYFGGLFGDSTMAILMNTPGQASAIASTFEGHRMALNGRAPQALATAAIGAFIG
 GIVSSFIVVFLAPTALAEALSTAFGPAEYFALALFAFVATSSVVSDFVKGLASLIFGLGIA
 TIGIDSVTGIERFTLGAPQLFDGISLVTVTVAIALGEVFYIAARARRDKANLETRSAGR
 PWLTGTEFKEAAPAWARGTIIGLPFGVIPVGGSEVPTFLAYSTERALDKRRKDPQFGDKG
 AIRGLAAPEAAGNATTGMAMGALLALGLPVSATAAIMLAAFRQYGIQPGPILLFDRNPELV
 WALLASFFIAMIVLLFINLPFAQLWAKLLIPNHYLYSGIALFCGLGIYATSGAVFDLLM
 LLGIGVVALIMRRYGYPLAPLMIGMVLGPLAETSLRDALLSSVGDFSILVSSPITWSLYA
 VLAIFIAVSVITAIRGRRKHLTSQLETIDA

>aaRXN00087 TRANSLATE of: rxn00087.seq check: 6949 from: 1 to: 528
 MIGGIIGLILSVIIMAEKLAILEDPGHITSCDFNAVLACGDVMRSGQANAFGIPNPLIGI
 AGFAAVAIIGAGILAGGGFRGWFWGAQAGLTFAMMFCHWLAYQMSVIRALCPYCMGVW
 TVSIIMFVLVTAWNVTFTSGSDSTFVNALYKYKWVIAIVWLLIIAAAVWSFRYMF

>aaRXN00096 TRANSLATE of: rxn00096.seq check: 1688 from: 1 to: 303
 MTNAGDNFEIRMPSGTDDPLSDAEIQYREEINRLDREILDVKKRRTKISQTIGKTRMSS
 GGTRLVHTREVAIINQFREEIGEEGPALAGILLRMGRGKLG

>aaRXN00097 TRANSLATE of: rxn00097.seq check: 3726 from: 1 to: 1176
 MEVPSLFTNFFAVNNPDSPPARQKTKLRELEHFRWQEHLPGDDDDHSTAISSLAIVTGLT
 KAQVSRISIAFATLADLPKALQKLYHLDLSRLITISNELAGINPDNLGADAILTEY
 LTATSPNQILPSPASIGRKIKEIRDLLDDARATGSRGTQDDSSFGVTSPDGTAEIGASV
 DAVDGHINDAVTQHAKKNDLTGEAFSDILRNNIQVKVVLNLYTAKDLANAPVWASGIG
 WLDAKTGTFWSEKANKEQMDAAAKISTDKHDPALRDALIGRDGTCRFPGCSVPALKT
 QADHRIPYEEGETCLGGIGCLCQHNNMKTDRVVTYLLDPFSGIIVWLMGDGTWAVSEP
 NGPLNPKNARWAQTVAQHRARHHRWVKEDAK

>aaRXN00114 TRANSLATE of: rxn00114.seq check: 4118 from: 1 to: 489
 MKLLKFAAAGTFALALAGCTQTESLVATIESATSAAQASGNDVEGDQTSFELSVMGECFN
 DTYEEEISEVPIVDCAEPHDNEIYYLYDIEGDDFPTDITTTGYEGCLPTFEGFVGAPYET
 SIYEVYPMTPTFGSWTNGDREVVCVYLATGEQMTGTAAGTAQ

>aaRXN00120 TRANSLATE of: rxn00120.seq check: 1348 from: 1 to: 840
 MLIGMSNQTVNQAVSSGVKASPHRFNRFEIKYLITEQDVPALREQLATRMSTDPLSPGG
 YRVESLYFDSADLRCTEIEGLKFRRLRIRTYGDGVLTPESTVSVEIKQRVNKVTQKR
 RLDLPFIYALALGDSTGAAVGEQVDVEKLEISPENQHALLIHEMASFAKNYRLRPIATTK
 YHREAFVGADAEESSRVTIDHGVSGRDRDFLLGQDLEDRPTVAQGLAVVEIKCDERVPFW
 LTDMTAQLEMSVIRMSKYCETIEAFHNRPASAFGAVDPIF

>aaRXN00128 TRANSLATE of: rxn00128.seq check: 1749 from: 1 to: 1704
 VSKISTKLKALTAVLSVTTLVAGCSTLPQNTDPQVLRFSFGSQSTQEIAGPTPNQDPDLL
 IRGFFSAGAYPTQQYEAAKAYLTEGTRSTWNPAASTRILDRIDLNTLPGSTNAERTIAIR
 GTQVGTLLSGGVYQPENAEFEAEITMRREDGEWRIDALPDGILLERNDLRNHYTPHDVYF
 FDPGQVILVGDRLWLFNESQSMSTVLMALLVNGPSPAISPGVVNQLSTDASFVGFNDGEY
 QFTGLGNLDDDLRLRFAAQAVWTLAHADVAGPYTLVADGAPLLSEFPTLTDDLAENPE
 AYTNTVSTLFALQDGSLSRVSSGNVSPLQGIWSGGDIDSAAISSANVVAVRHENNEAV
 LTVGSMEGVTSDALRSETITRPTFEYASSGLWAVVDGETPVRVARSAATTGELVQTEAEIV
 LPRDVTGPISFQLSRTGVRAAMIIEGKVYVGVVTRPGPGERRVTNITEVAPSLGEAALS
 INWRPDGILLVGT SIPETPLWRVEQDGAISSMPSGNLSAPVVAVASSATTVYVTD SHAM
 LQLPTADNDIWRVPGLLGTRAAPVVAY

>aaRXN00154 TRANSLATE of: rxn00154.seq check: 3981 from: 1 to: 843
 MSFSDPYAGNIFGGHSRNKQPEYPDVPKAPGLVVEVRGDGFGAVTGTFERTYDGDVRL

DRRGRDALYKLRKGAFMIDGQIVNLTRFVEKQAPRKSNSGSRVVENAQAKVAAPSRIVVE
GIHDAIVEKVGWGHDLRVEGVVVEYLEGLDNLEERLAEFQPGPGRRIGVLADHLVEGSKE
TRMTKSLPADVAVTGHPYIDIWAAVKPERLGLKAWPEVPYGEDWKTGICKRVGWSDPKEG
WHRVYNAVNSFRDLDTLIGAVERLVDFVTNLDLSKEDVLA

>aaRXN00162 TRANSLATE of: rxn00162.seq check: 4822 from: 1 to: 354
VSTTTPIHPERKKRVRQALTMFSIAAWVTGVFLLALVAEMIMKYIIGMDLPEWARFVPIA
HGWVYIVFLMTLNLGLKARWNPTRWVTTAIGVVPLLSFFVEHNRKEVTQTFQLNS

>aaRXN00167 TRANSLATE of: rxn00167.seq check: 5803 from: 1 to: 498
MYLLNPPVTEPEILTVNEIPTVVAVFDNHPMNDMPAAFDQTYQVLFPTLGAKGIAPIGPG
FALYTSEPTDTSFEVGIPVSQPLEGDVSAASGIVLKNSVVPAGKIARISHIGSFDGLSQ
AWGSFVEALESAGHEIDMPCWEVYVTEPSPDMDPATLQTDLYVLLK

>aaRXN00171 TRANSLATE of: rxn00171.seq check: 2615 from: 1 to: 258
KDQQKQIHNLAEEVKRLRERDDARDQQGLGVLEAMFSLLDGLDRFRESGDEASFNAALN
YQAVVAPEMFKTVYGVDPSTGEPIPT

>aaRXN00194 TRANSLATE of: rxn00194.seq check: 2468 from: 1 to: 441
VAGSSHTIEPEIYRGVSTLDEPSAAWGWHLKRNTIQLAGWISVLFMLGYNFGNHKGHVE
TIWLLVITALLVIGLLIHLFEPKLFQVRTITSRNKPVGHVPEPDWTYDQATLTGTWGNLTD
SQLRSVNIEPSRVAHLRAADSAKELDN

>aaRXN00197 TRANSLATE of: rxn00197.seq check: 7429 from: 1 to: 1212
VAAYLLGVVLFGLIAVTIALHEWGHFITARIFGMKVRRFFIGFGPTVFAKRRGETVYGL
KAIPVGGFCDIAGMTAQDELDPEDLPRAMYLPWWQRIIVLSGGVIMNLIVGFLVLYGVA
VSSGIPNPDVDTTATVDTVQCVPETQISATELSSCVSGSPAGDAGIEHGDKILAVNGQEM
ASFTAIRDAILELPGETATLTIEREGTLFDVDLQVASVTRLASDGSEITVGAVGMSSLPP
TDVYKKYGPPIEGVGATARFTGDMISATWDGLKAPPAKIPGVVASIFGAERDVESPMSSVG
AVRIGGEFVERSMWDMFMMMLASLNFFLALFNLVPLPLDGGHIAVVIYEKIRDFFRKLR
GKPAGGPADYTKLMPVTVAVAALLMTVGGLVIVADVNNPIRLFG

>aaRXN00216 TRANSLATE of: rxn00216.seq check: 8301 from: 1 to: 990
LGAYGLGELPGKSAAEAADIIQGETGDLHLHIPQLPARGLGADLIGRTVGLLDMINVDRA
RSWVMSTRPSRLTHLTGDFLDMDLDACEETWGTGVDKLIKQVAGPWTLGARIELANGHRV
LSDRGAMRDLTQALIAGIDAHARKVAGRFRAEVQVQIDEPELKSIDGSLPGTSTFDIIP
AVNVADASERLQQVFSSIEGPTYLNLTGQIPTWDVARGAGADTVQISMDQVRGNEHLDDGF
GETITSGIRLGLGITTGKDVVDELLERPRQKAVEVARFFDRLGVGRNYLVDAVDIHPGED
LVQGTITEAAQAYRMARVMSEMLSKDSCDL

>aaRXN00222 TRANSLATE of: rxn00222.seq check: 4411 from: 1 to: 1146
MTPTADIWFKDTLAAHFTRDGDQTTFSYADYAGPPIATSLPINSEPVITRSGAIPFFFA
GLLPEGRRLSSLRRNIKASADDELSLLAVGADPVGAVAIIPHGENTQPAPPTVDFDEL
DFAALTESGIADPVALAGVQDKASARTIAVPVASDAILKLSPEYPYLVENEAACYQLL
TKNKLRIELSKVEVLHDKHGRSGLLVHRFDRTPKGIKIPVEDAGQVLGIWPAKYLVSIED
IAQALTQVCASPILAMRNLAQIAVAWLSGNGDLHAKNISIINKGRGFEISPIYDIPATA
VYGDITMALEIQGSKKDLQKKFLKFCSTIGLPEKTAMSVANAALLATENAAETILASGN
FDTRMNRDLARVLKHRRSAWGA

>aaRXN00232 TRANSLATE of: rxn00232.seq check: 1106 from: 1 to: 510
MNDRAHQIRIGDIERSQALDRLGSYFADGYLDIDEFDTRTGAAAIARTAGEIDVLFDTLPE
QQASTAVTPVQDDTEKELDLVLQRGKKLKQIDSAIWAVVMVSFFLGLFVFNVPYFWVFI
LGGAASAGARFLKVDDADEKLFEELHSKEQSEREARLRIAAQRRRELEQ

>aaRXN00236 TRANSLATE of: rxn00236.seq check: 116 from: 1 to: 726
MVISFVGWALSFMGTAPIRQLQQIPEDVPPARGVEVPQIDTEADGRTSNHLRFWAEPIA
QDTGVSAQIAAYGNAELIASTAWPGCNLGNWNTLAGIGQVETRHTYNGKMFGGSSLDEN
GVATPPIIGVPLDGSPGFAEIPDTDGGELDGDTEYDRAVGPMQFI PETWRMLGLDANGDG
VADPNQIDDAALSAANLLCSNDRDLSTPEGWTAHVSYNMSNQYLMVDVRAAASYALRQP
AI

>aaRXN00242 TRANSLATE of: rxn00242.seq check: 7148 from: 1 to: 1278
VNEWRTVSLVDSTALTVIISVAVFTSAVALLGVVKKRSRWRVLGALISSAVLTSGAWVVI
EKLWKPFDPNPWTIYLSAGLAVFPLLSILFRTGRTRILMATLTVIALVNTAAVINVIYQ
PYPTLGSFNPVPTAVSMSYADFESQTTAPTMDDDREVGALVQVPLAGTTDDSTSGFDARDA
YAYIPPAYWDNPSLQLPVLVLMPGNPGQPDQWFSSGNADQTADNFQATHDGISPIVISVD
GTGSFSGNPACVDSDAQSVMTYLSHDVPMLIKQKFRVNQDQRTWTIGGLSYGGTCALQIM
TNHPEAYGSFLDFSGQEEPTLGTQQTVLQDFGGDEDAFKAVNPEDLLNQAISGAHTYS
GISGRFIAGSNDKSAVSALSHLDNLSNAGMSTTFDTVAGGHSFQVWRVALANTFDWVAK
RGGLQV

>aaRXN00247 TRANSLATE of: rxn00247.seq check: 2491 from: 1 to: 927
MQTLIFIAIAGVAAQLVDGGLGMGFGVTSTILIMLAGLGAQASAVVHTAEVGTTLVSG
LSHWKFGNVDWKVVVRLGIPGAIGAFAGATFLSNISTEAAAPITSLILALIGMNLVWRFS
KGRIRRDYSDRPHSRGFLGGLGIVGGFVDASGGGGWGPVTTSTLLSLGRTEPRKVVGTVN
TAEFLVSLAATLGFVVGLWDDL VANLSAVLALLIGGAIAAPIGAWMISRVNATVLGGFVG
TLIVTLNLPKVLNVVGLDFIPTGLIQVTVLLIGLPLTYLGFRYRKNLLNETISSEVVSE
PKGQKIKST

>aaRXN00256 TRANSLATE of: rxn00256.seq check: 519 from: 1 to: 771
MFMSLKTRRIFGALAVSLISFSAIATPAASAQELVVSTSAVNEFGVVTSDITAEQILQA
QDLIAEMKQSEDIYEYFGALSDVEQRSIIAAVKENPYLIENESPRMRVQSETPDEETPKD
KKPSKTYKLYMSILEMMSCINLVDVPSCAQALKAANIAEREAARYPDSVTNGKGDALRH
CAWSALMTIRIGKDAERIGNAHETVVRGEPEEREMDLINNALGRDIGERFIINGDETGA
LSTCVSMANIGLLHTLL

>aaRXN00264 TRANSLATE of: rxn00264.seq check: 1681 from: 1 to: 378
LLVDSDGVQLEGVTVEPTQLAYTGINETQLRIRNIGTTPARTVLLGGEPFTEDIVMWWNF
IGRSHEEIAEYRKQWQAEADRFGITHGYISHHKDGLTRLPAPELPNAAIKARKNPAPTAR
PETRID

>aaRXN00267 TRANSLATE of: rxn00267.seq check: 9930 from: 1 to: 318
MRNSKSGLAFAAALFCVVAVITRIASSPSFIAIVAIIVAAIALFVGLNSRVGTKLVDQP
VVFTQEIQIDQLKELKSRDQEAARQAQLWSRGSSSEAVAEAVRKL

>aaRXN00271 TRANSLATE of: rxn00271.seq check: 7582 from: 1 to: 990
MFSSRSKVLASIFTVGALALASCSSDSSDSTSTDAAGDSYRVGINQLVQHPALDAATT
GFKEAFEEAGVDVTFDEQNANGEQGTALTISQQFASDNLDLVLAVATPAAQATAQNITDI
PVLFTAVTDAVSAELVDSNEAPGGNVTGTSDIAPIEQQLLELLQQLVPDAKSIGIVYASGE
VNSQVQVDEVTKAAEPLGLSVNTQTVTTVNEIQQAVEALGDVDVIYVPTDNMNVVSGISSL
VQVAEQKQIPVIGAESGTVEGGALATLGIDYTELGRTGEMALRILQDGEDPATMPVETA
TEFTYVINEDAAERQGV EIPQEILDKAERV

>aaRXN00272 TRANSLATE of: rxn00272.seq check: 8098 from: 1 to: 372
MPEPETSTMGSIQKSGEVLVPAYSAYKLNGADLFLDIRHATAAAPVITFDVNMTMGSMTL
IVPPGVYEVQMASKNWSDFKVQTTNPLPGAPRVFITGVARASGLKVFTKHPHEPFQFWQ
KMFE

>aaRXN00283 TRANSLATE of: rxn00283.seq check: 5995 from: 1 to: 1032
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IGPQALFDASVRTFLISPALLLVAVVAVFFAYRRRDPEPIIPLALIGSVVFFQIITYSLG
STFGLLRFFLTALPLTIILLFQIIPRHRFPRLPGACYRDRVTGKYVPKTTITGVLVLA
FGGTGITLYGMSSANWAPQEYAIQELVFNMGSPSQDAVHTLNTFSTEMDVADFVDSLNLG
DGEVLLSTTYGFAVLTAASNQKQFIIPSEDEFITTLNEPAEHGVKYILALPREGRGATDP
INLRYPDMYETGSHIATMEIEFINQGGQPNWRLYRVLTTPPEQS

>aaRXN00334 TRANSLATE of: rxn00334.seq check: 4035 from: 1 to: 336
MAKLDNDVQIETVNVVSFEAGGRTNWHTHPVGQNIIVLSGLGIYEAGEPARLLEPGDVVF
AAAGVRHWHGAVSGAPMFHVVNVLKGIDGETVDWEEPVDEEHYRSVS AELQR

>aaRXN00338 TRANSLATE of: rxn00338.seq check: 9343 from: 1 to: 1140
VSDVTVGDIRRILDEAYPPALAESWDKVGLICGDPTESVKRVGLALDCTQAVADKAIVDMG

LDMLIIHHPLLLRGVTSVAADEPKGKVIHTLIRGGVALFSAHTNADSARPGVNDKLAELV
 GITAGRPIATRLLGGMDKWGVHVLPKDAAYLKKMLFDAGAGAIGDYRECAFEIEGTGQFR
 PVEGANPAEGDVKLFKSLELRIEFVAPRNLRLTSVLREAHPEEPAFDIVEMHSAES
 LENATGLGRVGEPEPMRLADVFQVANNLPVTEWGVVRATGDPEQMVSRAVAVSSGSGDSF
 LNDVIKLGVDVYVTSDLRHHVPDEYLREGGPAVIDTAHWASEFPWTSQAQEILQDKAPQV
 EVDVISIRTPWTMSARAVN

>aaRXN00342 TRANSLATE of: rxn00342.seq check: 3222 from: 1 to: 429
 VADAPGAVKQGAQDYAQLLGIQSGHIVQEIGWDESDTLISESIEDAIGEELLDEETDEL
 CDVVLLWWREDDGDLVDGLVDSIRSLAENGRIWVLTGIGKEGALAPGVISESAQLAGLV
 QTKAERLGNWQGSCLVQRGNKKP

>aaRXN00344 TRANSLATE of: rxn00344.seq check: 1354 from: 1 to: 879
 VDLSTWLSDTQYLLISVDFVQHALIASALLGLLSGVIAPLIVRQQSFVHGTAELALMGA
 AAALLFGLNVGGGAVIGSVVAAILLALLGMKQQDSAVGAVMSFGLGLSVLFHLYPGRSS
 TAFSLLTGQIVGVSSSSWLILVAVTVIVSVAVVIFWRPLLFAADPIMASGVNVRFA
 VAFVAVLGLTTSQSVQIVGALLVMALLITPGAAAVAVTANPVKAVVLAVIFAEVSAVGGL
 LLSLAPGLPVSVFVTTISFVIYLVCRLLIGWLRGRGAQQRDEDAYRRRQHDHHPH

>aaRXN00353 TRANSLATE of: rxn00353.seq check: 5475 from: 1 to: 693
 VGRSFTNRTFDPLPFMVVYPDGVDQHWNDARLGLDENTRHLGIDDVGFVVKLATHLGNTY
 GIKRIFIVGYSNGGQMVLRMLMHEVPKMLSGAATIASNMPVAENTLPQVKTFKTHPVPLYA
 MAGTADTFSPYEGGDAGIGREHRRGVMSAFDSAAIYAARNGLTEHRHDVIDDVVSIDTW
 DGENPVEFWTLNGIGHLVPSGKTYPEFLGPSTTSVIAAEEIGKFFDGVRRR

>aaRXN00354 TRANSLATE of: rxn00354.seq check: 80 from: 1 to: 813
 MGKLLFVDIGGTLDDYSNEVPRSAVDAIRKARAKGHRVYLSSGRSSAEVTSQLWDIGVDG
 LIGANGGYVESAQESVFHRRLSGEETHIVEWLYNRGLEFYLESNNGLYASRGFREASKP
 VLSRLSEKTDVTVDSMYPDMFWGASLDRDDVNKISYIFNSQEDLDAAREAFPNEHTTWG
 GQTGALFGTIGSVNKKIGVDRLLKYLNADRANTIAFGDSEDLSEFEASAYGVAMGEAT
 ESLKAAADLVTDVAVGQDGLRNAFLKLELIDA

>aaRXN00362 TRANSLATE of: rxn00362.seq check: 1707 from: 1 to: 1347
 MGIIALLVFIAIAVILNVFLKRDISEALLVGLVGTALVGGVNAPTLLIDAVVDAAQSEVT
 FAGMAFVFMGIVVQSTGLIDRLIAILNSIFGRLRGGAGYVSTLGSALIGLIAGSTAGNSA
 TVGSVTIPWMKKTGWTAERSATLVAGNSGLGVALPPNSTMFIILALPAAAASSASQVYIA
 LACGGAYAVLYRLAVVIFYWTRKDKIPATPDDQRVSFGEAMKTGWRSPILIFLGILIPVILT
 IGPLSEWLKTHGVGESGVKSMIIIVWPILITAIALIEGRKRIANNMAHFRVQISKDLPO
 FATVGISLFSALAAANIMEELGVGPQLSNWLDSDMLPKSVMVIVCIVVATPLSSTA
 TAAAGAPAVAALAAVGDPTVAIVVILLCTSTEGASPPVGAPIYLSAAIADANPTKMFV
 PLITYFVVPMILLAWLVGMGFLPVIVPTG

>aaRXN00373 TRANSLATE of: rxn00373.seq check: 1756 from: 1 to: 339
 MDIQQLDAETTAWKDSLLRAAQEAGFHFEPPKLFEDFETMVEQYKQAAASDPDIDVTDIQ
 QMWGIVVGEYLRKMGMEWVITDDYGTDLAILATAPNGDHVYSCPIIVVGKR

>aaRXN00390 TRANSLATE of: rxn00390.seq check: 7582 from: 1 to: 405
 MSTTREIAFLIARILLGVILIAHGWDKFAITGLEGVGTGFFDSLGIIPAAGIAAIAAVVEL
 LGGILIIILGVFTRIVAAFAIDMLFAALFAHVSSGIFVTNNGWELTGAIGAGALLLIAGV
 ASAWSIDGVLAKRKA

>aaRXN00399 TRANSLATE of: rxn00399.seq check: 2271 from: 1 to: 315
 MSHNDSPNFARRALNWLRRQGYPTGVPRHDTFALFYVLERELTEEDLNELAEILLIAEGENN
 GLHDNPITREKIGKLITHVHSQPPEDEDIDRIQKKLQAEFGFPTRN

>aaRXN00416 TRANSLATE of: rxn00416.seq check: 8529 from: 1 to: 1650
 LASYLSPTALVVAVLAIPLSATRLYLDGISVDQGFRTQFLTRMADDIGLSDMNYIDMPTF
 YPAGWFWLGGRLANLLGLPGWEAFQPAIVSMAVAASVLVPVWQRITGSLPVATGIALVT
 TCIIILAMNSEEPYAAIVAMGIPAMLVLASRIAKGDKFALAGGIIYLGVSATFYTLFTGAI
 ALSAVAVCIIVAAIVQRSIKPLWLAVLGGGSIVIALISWGPYLLASINGAERSGDSATH
 YLPLEGTQFPVPFLASSVVGLLCLVGLIYLVVRFHNNNEVRAMWVGIAVFYAWMGMSMAIT

LLGNTLLGFRLDTVLVLFATAGVLGIADFRLASVYQLYPTQITERTATHLTNLIVVLV
 LGGLLYAQDLFPQKNARAILDAYTDTGGERADLYPAGAARYYKDINDHLLDQGFEPSET
 VVLTDELDFMSYYPYRGYQAFTHYANPLGEFGNRNAFIEDLAIRSWDELADPQQFSDAL
 NTSPWTIPEVFIIRGSIDDPDAGWKYDVAEDLYPNNPNVRFRGVYFNPESFDQMWTQKV
 GPFVVVTHNE

>aaRXN00422 TRANSLATE of: rxn00422.seq check: 3762 from: 1 to: 894
 MPTNYARDNVISLASAREQRSGKPEPKPELTLIVRATNVQADGEVHRQIGLNSAMSLDEL
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 YPRDNGTPRALCIGSGGLGDDFDQATINAELTGDTTIRDVLSGVRPEVIDLVDRTGVFD
 FIPLLQALDLKREPLIDATRYHTCRTLPVENSASDAFWSCVLALSCLGNDELFIIEVIE
 STMSTLGWVADDGSPLRAPEITSACEASLKILAEELGGYGPRLAPVDRLDIYRELLCF

>aaRXN00447 TRANSLATE of: rxn00447.seq check: 3535 from: 1 to: 420
 MLGSLWRFAVRTAAGAVALWVVIKIDIGISLSFPTTPLYQDGHNDLLTFLAVAAIIVVL
 NATVKPVLKLLGLPLTIITLGLFSLVINAVIMLLAEYVSDLIGFGLRIETFGAAFVGAIV
 LALVNWVLGPITGLLAGAKK

>aaRXN00455 TRANSLATE of: rxn00455.seq check: 9756 from: 1 to: 750
 MVVDVQNQSHTPETQPPQGGAAKKTTPVASGNSTFIHIQPSLYPILLALFVAVFLISNIT
 ATKGVEIGPLVTDGAFFLFPISYVLGDVLAECYGEKSTRRAILTGFGITMLAALSFIISI
 WLPGASFWEGQEAFAEATLGLVPQIIIVASLAGYIVGQLLNKVLVAIKKRTGEKSLWARLI
 GSTVVGFEVDTLFCAIAAPVIGIATAPDFINYVVVGFVWKTLLLEVILMPITYAVIRWVK
 RREGYETFDA

>aaRXN00473 TRANSLATE of: rxn00473.seq check: 5144 from: 1 to: 789
 MSGTGVRKLWGDGTPVSLPDLGLSRAERIDALSRMSTMGAAPVKFEPSVEESAEQKQD
 SLAEKQDIVAVPSAFSDLFPDGLPRAVTQLVEQPLVVVDFLAHITAQGGHAAVIGWKD
 LAYAGVIDSGVCENIIAIPNPGTEPLNVAAVLCEGLDVVVYKGPESLSPTRARPLLK
 LRQGTAAALVMVGTVSSPALSVD AEITDYVGIGAGSGRIRGVEMQVRAVSKTHGVRSGKV
 LISRPQDAALLEPEQPTTLRAVP

>aaRXN00485 TRANSLATE of: rxn00485.seq check: 6436 from: 1 to: 2295
 VSSVNDLFAKPYENADLVVTVSAKNEDSFAAFEQQLATTPGVEALAFDQNFASVKQSDG
 IYASTSVQSISEGPLQWRPILEGRLPQGPGEIAVTTAPGAPEVGEHVSIRLSQNTEDTEV
 LVVGVVEPAAQETLGGAPFVVASPDALMEWNSSGVRGEFRVATSDPASLEAASFSDATVV
 VASAEGHVDKLDADSYLGQRDRYFLLLAFFVAVAAVAFLVVFSAVSVLTGERVREFGLIR
 SVGASTPQILGSVIFEAGILGVVAAGFGAPAGLMAARLLADNAARFGIRVPIDVIDLPSS
 TMWLIAGVGVMSVIAALPAVFSVCRKSAVESLSTPAISRTSPWFGLWLLLAGIVGAGG
 MWAYEATSDYRGMRSVALSIAGSGALVCALLIATAVLVPWLLHVFSTRIVGGTVPTLQLGL
 AFAAKQKRSRAALIAVILAGSALSSAVLHGQAHIGTHLVAVAKMGMDMMVTALDGEIP
 AGMLEEISSIDGVKTAIAPATTAVELEDSGNFSVLMMLAEDGASVMRAGDTGAPAGGLVL
 GRNSPDQDAYPAGQAANIIVADTPTQAEIFHSDNYFSMIDPALATGPSTTRNVLLLDGD
 SNQAPDNATAQAVRKTISLFDGRYSITEGFSARONTFELVSRTTMTLLAIVALAIAAV
 GLINTVALTISERARDRYLLRTIGLTSTGQILVMAIEMIALSLPAAIVGAVSGGFLGRFV
 ASSATNTAATAPLQVDILGGTVLAMVAGSVLCALIVLANKRRRVV

>aaRXN00496 TRANSLATE of: rxn00496.seq check: 7171 from: 1 to: 1026
 MTRRLHGGEQDQGEHVKGQLKQLFDDDAFLTDLSRGVDPSEGDDALAGLLLDLTKEAQEP
 PATMPDWSTLLPGILDQDQDLPVESTSDTTVMQASNPATQEFAPVSISDTPNTATNSADA
 DESATVVPALARREKRAKSGSSGVHSLDASATQRKSHPFSLGLVGAAAATLVIAGGGA
 YNADENSPLYGMNQQLFGNQDPSVVELASTLEEVDSTASGDVEGARALLEQARAMLDG
 MAPPRKAPSEATRTVESEPGTQTLTATVTEASPEPPVTETQTVTSTEVQTVTTTAVAPP
 WTPNPEPTTTAAPTSTPSTGGGEGTGNDGDSGLVPPQTPGN

>aaRXN00503 TRANSLATE of: rxn00503.seq check: 5802 from: 1 to: 1722
 MKPVFSVDQIRRAENTLFELQADPDELMISAASAVADVALAMVDGPAPAVSSEESILLV
 GPGNGGDALYAGAFLAEEGHHVDALLGNGKVHQSALAYYESLGGQIISDFPPHYLYRL
 VIDGLFGIGGRGGLTPELASLVESFSASGIPILADVPSGVHADSGELPPGVMVTVEGFD
 NDAPMARQKIPAHIDADVITITFGGLRRRAHVSPACGEVLCADINIAGGGGKSLSAELS
 QVQAEATPQMFASKAYQRKDSLFRANLKAAPHIHRIGQHTVLNMEPGPDHDKYSGGIV

GIVAGSGTYPGAAVLSVKA AVRATSAMVRYVGPALNFVIQSLPEVVATQSLATAGRVQAW
 VHGPGRGLEAEQSAELAELLSRPEVLIDADSLSLQLSAELRQALRERKAPTIVLTPHKG
 EFERIAAELRSEGVEIPQADKDPIGAAQALAKEFDCCVLLKGKYTVIAAHDFVHAINAGH
 SWLATPGSGDVLVSLVGAHLAQSYAELNRLPEFFPDVTLSDSAIYQTQIAPAATIHAVAAG
 LAARTEFGFAPTSASLIADAIPAATAKVDLKRIV

>aaRXN00504 TRANSLATE of: rxn00504.seq check: 4338 from: 1 to: 420
 MTYGLVNTDLTHRAIDFDLENAAKFLGGADDGRVAVAFQEDGTLYAALYSASAKDEGAA
 ANPVASLGRNAAATGDGSFFSDPTTAICGPVIFVGAEGEDITLDEIERIKDGIRAARNYR
 DDYPEEFNLWRNAVYNLRTA

>aaRXN00505 TRANSLATE of: rxn00505.seq check: 7863 from: 1 to: 495
 MKSEFPVSGTRRFEHAADTQNFGEELGRHLEAGDGVILDGPLGAGKTTFTQGIARGLQVK
 GRVTSPTFVIAREHRSEIGGPDLIHMDAYRLLEDSEADADPICALDSLDDLDLAVVV
 AEWGGGLVEQIADSYLLITIDRETAVQEDPESEARIFHWEWREGR

>aaRXN00507 TRANSLATE of: rxn00507.seq check: 8687 from: 1 to: 855
 VAENLNKHLKSLKRGPHRVLVGDMNYAGIPGKIYTPAEGDGIPGVAFGHDMKSIKYYH
 QTLRHLASWGIAVAAPDTENGFMPPDHKGFAASDLESSIQILGGVKGSGNVTNPAACLGVV
 GHGMGAGAAVLSAANRDLVRAGAIYPAKTSPSAIDAAFAVKAPGLVIGSSSLGLFESGE
 PAKLAANWAGDVCYRESEKGNQQGFSEDTMFKLVAGIGSPQTGAQETVRGLLTGFLHQL
 AGEKKYKAFSEPDAEAKKVVS YFGQELQEHAFPKDTS PF AFLNEK

>aaRXN00510 TRANSLATE of: rxn00510.seq check: 4920 from: 1 to: 1509
 VNDPLAGYGAVISALQGASGGMYRGPASEGQLREMYQTIEGLDTSSLREAAEA AVGGTN
 EARIQWVGPLLKFFGTVGGMIAETIAERAVDWFKNRNDVEEVSEADKAADAIDSTVT
 ESDQGMHIIQQLLDIVSTLTQILGSMRGRKFPQEFRDCVQTGADLIDQAGDMLEGLCAD
 RDDAISQCFSALTDHGKQVCETEPKPLCSAASGSSGGATSSAAASSGSSSSTASSGSS
 GGSSAADSSTSTNAESSVEKEKTTAAVEKPDKEKPVKEKPEKPEKPVKEKQECCEE
 KPDPDPEKCKTEPVECEPTPKPETEPEPKPTPTPTPGTPTPIPELETEDCEPGKETGTDS
 ESESEECAPELNDVPEESDLIGQLIKGAIGIGIVVVGVLNVFLEQCVPVIEEVPVPEP
 EPIPEPAPQPEPTSVKPPESSELDKVAEPAPKPIQANYTAAATNYSAPAHAPVVPITPA
 APEVPAPEVPAPAVNLHKAGGW

>aaRXN00515 TRANSLATE of: rxn00515.seq check: 5675 from: 1 to: 702
 MRFSRVLPA LLITAVSIPTASAATLTADTDKELCIASNTDDSAVVTFWNSIEDSVREQR
 LDELDAQDPGIKAAIESYIAQDDNAPTAAELQVRLDAIESGEGLAMLLPDDPTLADPNAE
 ESFKTEYTYDEAKDIIISGFSSDPASDVLSQLQQAATTGTRTAEIRAEVFADRTDDYNESQ
 TALKEDFQNCIDAIDDARPIPLQYILIGGAIALAVIVLGIRAWTNSRKQSKHSQ

>aaRXN00527 TRANSLATE of: rxn00527.seq check: 7113 from: 1 to: 1764
 VIATSDVREISSEGIVARVSVNGNIEAARTTTIYTSLTVPVANLPVAVGDRVAADQVLAE
 LDASALQRQLDETANNARAAMANRNSIAQSQAYEQSRELLDSGLSPEINSARSSLRAS
 SQAYQDAIRSFEAKQRDVGGLDSTMVAQSDALKAAREQADAAEIERLRADFGLLNDRS
 NLNDVIGLLDERESLASAESELAQARAAGDLEAVAAAAEAKVAGLEQSIASKTSTWPSQDQ
 TYLQSYTALEEAERRVASTTEALEIAERIYIDSLGKVDSELAQAQRAVAEHAQAQDAAL
 GLETAQLSTQHLEAQSSAIDAALGLASVDNEAATRSTSQLRMDINNTTVRSPYSGIVSS
 VQA AQGPAGALLSVADDSELKITANVKEAEISNVTIGSRVFTTPTSTGTKEFAGRVSK
 VSPIAAAAAPATGEGAAAGATTTNTDVTFFPIEISVTGDREGLNLGGSARVRIVHEIAPH
 VLTVPLEAVYKNDDGKDAVLIISDDNKVEEVEVKTAESDDFDIAVSGAGISEDARVLTQP
 GNYRGLIGETVKLHADTVEQAAAPFSPAAPFDPAAPAVSAKQTVGQVI

>aaRXN00547 TRANSLATE of: rxn00547.seq check: 6032 from: 1 to: 1398
 VARDFINAIGGRFGRFAQVGTQRFWTPRLVLITSLVFLAMGFLTKANCIQSGRGTGQV
 SLNWSGSRQYTSACYNDIVPLYGGRGIDAPGFYAFSWQEGDLTRYMEYPVLGGIFQWIC
 GIITRFLYPVVDVIPFHTLPESGLYFIVTALALAFFWVLVIRMMVELTGNRVWDTVLVAA
 SPLVAVHAFTNWDTPAIAAVIGAMLAVKRNPLVAGVLIGAGTAFKLWPLYLLGAYLVLA
 VKNKNLKPFTMAAAAAVTWLNVNVPVMIAYPKAWNEFLRLNRERGAEWTTIYQVIDRNL
 PINLNDPVLNLVLSFGLFGASCVAIILGLKVQRTPRVAELAFLIVAAFLFNKVVSPQY
 SLWLVP LAVLAF PQWKVLFPMVTDAMVWPILMWHMLGTDNKGLPHEMLDLIVISRDAFI
 VVMIVGVIRQMLGRADPVM DAHAGRDLLAGPFGAGERRKALKEVS

>aaRXN00552 TRANSLATE of: rxn00552.seq check: 471 from: 1 to: 936
 VATSKILLYYAFPLSDPKAVQLWQRELCESLNLRGRILISTHGINGTVGGDIDDCKAYI
 KKTREYPGFNRMQFKWSEGGAEDEFKLSVKVRDEIVAFGAPDELKVDENGVVGGGVHLKP
 QQVNELVEARGDEVVFFDGRNAMEAQIGKFKDAVVPDVETTHDFIAEIESGKYDDLKDKP
 VVTYCTGGIRCEILSSLMINRGFKVEYQIDGGIVRYGEQFGNKGLEWESLYVFDKRMHME
 FGEDYKEVGHCIHCDTPTNKFEHCLNEDDCRELVLMPDCFANVETRHCKRERCAAIAD
 FAEQGIDPLVTS

>aaRXN00555 TRANSLATE of: rxn00555.seq check: 6336 from: 1 to: 939
 MKQPLRVLISCRPEENSGGKRSEQNDVFEFAAWLARTSDINVRGITTFIRPWPSSSISK
 LGGKYHKWYKNLDSYYRSRTIKGLKEAGVEKSQWDDVSVFVDGPSESTLLTHAAEEFEA
 DLILLGSDATAPKGRFLASSTADALLHSSPVPLGLVPRGVKLSKKGVTRVNYAFTNESDD
 FEQGLRSSAELATNWNVPLRILAFSPTGITSAPTSRSLDISTELSSEWRELTAMLDRAR
 DGVLTDPNLSVSSETGSGWGWGAIDALRWKKGDLLCMGSHRTDTLSRVFVGSETMEII
 RNSPVPTIIYPGL

>aaRXN00560 TRANSLATE of: rxn00560.seq check: 5757 from: 1 to: 375
 MRIDPLETRQAVLAVKDWIEGEDVKKPGRAALAAATRLSVRLLAQHAPGNSVEVRVPPF
 VAVQCIEGPKHTRGTPPNVETDAKTWLRRLAPGQTTDAEFESGKISASGTRAKEIADWL
 PVVKL

>aaRXN00574 TRANSLATE of: rxn00574.seq check: 6894 from: 1 to: 879
 MSFKVISTGPQAIQDRGRFGFASAGVGTSGSFDRLSAARANHALGNPNATVVEILLGG
 FEVEALHTTSIVFTGTEAEVMVRTAGGQSKNATTNTIIDVAAGERIRVEPATYGMRAYFA
 ARGGFVAVKKTLSASTDLISHMGPCPIEPGDVIDVATDIADSQWWPKLRQLPTLWKRMPT
 ETLTVIRGPRDKWFTQESLNNFFTQVFTVSNDNSNRIGLRMHSSEPIQHRVEGELKSEGMV
 RGSIQIPPGGNPVVFGPDHPVTGGYPVIAVLTSRSCDRSAQLLPQDKVRFKLL

>aaRXN00589 TRANSLATE of: rxn00589.seq check: 4154 from: 1 to: 450
 MTTLSRKFFVSATTALAAVALVACSPNEIDSELKVPTATGVSLPSKNVSATSTATTTDEDA
 PGYIDCVAAPTQQPAEISLNCAMDIDRLTDISWSEWDTDSATGTGTRIVTAANGQETETE
 DIEVKLSFPTESSQGLVFTQVTVDGQVLFL

>aaRXN00616 TRANSLATE of: rxn00616.seq check: 2419 from: 1 to: 345
 MKSLPRFAPLITILALLVLAIGGSALANNRATPNVESEPATVNQRSTPTTSAYEPPATE
 SPEEPTTQIQESPVQPPVPAPAQIPQAPQVPLNYQYYDDDDDDDDFDDDDDD

>aaRXN00647 TRANSLATE of: rxn00647.seq check: 2211 from: 1 to: 633
 MGIFEAIRAARAKTKAEIKAAEAKVKTEAKNKAALDLKREKLLVQKEKNLLKVEEKGLKK
 RNKHELMKMAKNILEQKRQGRNLNKDKVKRWAGTARVLTPLLLPIIYRLSTEARDQVVKGRA
 RRAGVTAEQLSQFAGHAAALKARIQGVRETAKNSSLPAGFVRDVEERLNELEAAANNSEF
 MSPQQNRNRAHQISRDNLQVSDQIQDRLLDK

>aaRXN00653 TRANSLATE of: rxn00653.seq check: 8269 from: 1 to: 765
 VSVSQVVGIEILLTVGILALLFAYYEAYWTNVESGKLQESAGQKLDEWDNEARVNPRQKLT
 PELGEAFARMYVPAFGSDFNFVIEGTDEEDLLAGPGRYVDSQMPGEAGNFAVAGHRVGK
 GAPFNDLGNLEVCDIVVETYNWDVYRVMPMSTNGADRAAEAAADCFNENQVSRMAEGDY
 VNVSGRSITTPDRIDATYPTPGVFDTAVERGSEALLTLTTCHPQFSNAERMIVHAMLVEE
 IDKSSGERPAALEEN

>aaRXN00662 TRANSLATE of: rxn00662.seq check: 7679 from: 1 to: 1269
 VSTIPLNRLAVIAAIIIGVGTGLFVAALNWSAIGVERLVYGADHLHNYNPVANVSPLRLSI
 TVIVLSVVASWAWFFVHRTGPKESIVGAIRGEKMPILETIASAFLQVTTVAAGAPVGAE
 NAPRIAGALVGERFSRWLQLDIDAKRILVASAAGAGLGASFHLPLAGVLFLEVLVLEAS
 TRTVVIAIIITTTAAVATTGFFVQTPDVFSTVPLTESPWMLLAAMVTGVVAGMCGHWFSA
 AHKMAQASPKGVKILWQMPGLGFVIAAVIYFFPETLANPRWLADSMGLDGLILSTILLVL
 VLRTAMFLLAFRVMVGGNLIPAFALGSMVGGVVGAVLEPITNVPIAFAFALLGAAAFST
 TMAAPLFGLIAAVEFTDMEAQGYLPIFLAVASAVLAVRVWSVIAKHELRAIPITYASWTG
 ELK

>aaRXN00666 TRANSLATE of: rxn00666.seq check: 5076 from: 1 to: 915
MTAGEAIAHSVRAAQIAEEHNYARFWVAEHHNSEGLASSATTLLMGHIAGHTSRIRVSGS
GIMMPNHSALHVAEELGTLEAIYPGRIEAGLGRAPGTDPMTARELGRASSLVDDVLSTIV
SLQNYLDTPEERPNIIAHPGINSRVPLFMLGSSINGAAMA AKLDLPFAFASHFAPFQMGP
AIASYRELAANPYVMAAANVLVCDTEEEAEFQISTLHQMFAGIVTNSRGKLAPPVRNLKD
KLDPMIWKHIEDSLEMTFIGTAESVVLQLEFADRYKLDEIITVTYSYDPEVRFRSIAAL
GTAWN

>aaRXN00704 TRANSLATE of: rxn00704.seq check: 5954 from: 1 to: 627
LTITFSRVALTTLAVTATTLSTLAANAQSSLLDKTLDARQCIDADNVVSVVDYADSEK
EPEGACATEFTDGVVALESAGFKLTFDESEMKGMYMTGINGVVPDWWVETGTYWSYYSGEVA
DDYSVDYTYEYVGASNSEPEGGTVEAWVVGTEETPALETLPETPAATGSSSEDGGWIAVI
AGLLALIGGGVAALYQGLITIPGLVLPKF

>aaRXN00712 TRANSLATE of: rxn00712.seq check: 8070 from: 1 to: 696
MSLRKNLALGSSSTVLLTAVLSGCVSLDERSTDTSTENVTTVTATLTSTAAAEPTTRTTVQ
SATEASTTAPVQCNDPRTSDFGPYLAQSRTFPVGEAGSADSVVQVPDWFYHFQMGDNGY
DSCSKLSYVVLNGSNGDAERSTGTGAADVVVLFIDGHMVARPAPFEMKTVESVTRVSD
SEIQVYGHAGRSTAEGVTDYFTFNFFVDNGVLSGRGDLPEHIDTHMRLYLL

>aaRXN00720 TRANSLATE of: rxn00720.seq check: 5001 from: 1 to: 666
MASPRRPQVAAPRIKELRLTGLDNADPQDIESNEQIESCRFNEAELSERDLGAGFIECE
FLGLEAHETELRRAQFVETRIERANAPSFKAARSIWRNATISDSRFGAVEMYEATVQALK
ISDSKLSFVNLRGASLRDVLFCNCVIDELDLGQARAERIAFKDCTVHSLTFDHAVALSNVD
LRGLDIERISGVESMSGTVISSLQAADLSGAFARHLGITVND

>aaRXN00722 TRANSLATE of: rxn00722.seq check: 460 from: 1 to: 1065
AVLREAGVVDAGGQGLVILLES LAEQINGNPPHHPHSHSEPAEEPSFHGKTGDLEVMFYI
ACDSAQTLDALHNELETGDSLLIARETNTRGTVHIHSRRAGEVIQKAFAGDVSELRL
ILPDTSGSFTEEPRLVMAVAPDGLVAELYSAGVKVVARNIAQSKSDDVVAKIVSIARK
SGADEVILLPNGLLTKRELVS IERSSHAFFEQSVVILPTATLVAGLAASVHEPAQPLAVD
SYAMAEAAAGSMRTATIRAATSAALTQAGACSKGDLISFIGPEIALVSEELNDALSRTALR
LLDGSSEQITLLIAQDRQSAFDEDVFRRLGTHTDVEITVYPATGMENLVEIGVE

>aaRXN00729 TRANSLATE of: rxn00729.seq check: 9733 from: 1 to: 978
MSATNPDALDVQHVYPIKTKKTPLAVIFNIISGGLIGMAELVPGISGGTVALVLGIYERA
LHNGDLLIDLIKVLIKDRSKVKEAAKIDWWFLGAIGVGMVVMVFSMSSILHTVVEDYPE
ITRGLFLGMVAVSILVPLGMMDMRDAKKRLAIVIPLFIIICAMLGFFGTSFTSAPRTDPSL
IFVFICAAIIVCALVLPVGSFLLAVGMYAPIMESLSNRDLSVIGVFLGALTGVILF
VKVLSYVLEHRTITLTIMAGMLGSLRALWPWQDGDANLLAPGDNAVMI FSIILGGAI
VAALMFAERVSSKNIDSETVAEEHPR

>aaRXN00730 TRANSLATE of: rxn00730.seq check: 2858 from: 1 to: 807
MSSQQTIFIILLFAAVILISIVMITAAFKTRKKRFAARAEGMANPTIPAPTVPWQRFAGA
LAALYARPEWHKTRGAKRVYSAEQTYFGFVSAMPLGMVQNMLQTDWGVKKSEHAVDQLSK
GVEVIVGVAAGNWRKNGVSPAQVEEAGQRLAAEGLAHPHFVVVQKQLQQADPNAEYDLVD
LAFDIARVANLLRWAAYTDLLLPAEARWFQDQLGIAAAVSFGSWEEYGERYVRGLQKNFK
GGNKPYIEGERWLNTEAESPWKTQKWISA

>aaRXN00731 TRANSLATE of: rxn00731.seq check: 8578 from: 1 to: 2496
MKDASQSYLLFGLRWLGRSLRFAPLSLLMIVVMRGLREVFGAEDPANSSLVNDLGLTLPW
SLNDPHFLTAGFSASTTTAALMSTLWIIIVFAVPSEIRILGSLKFAITAALIHITSIPLGIG
IAHLIEEADLNRWGNMMLADVLLTPDFWVFGVAAFASAMPLLWRRRTRLFLFTITLTLL
LYTGTLDVTLTATIIGTVAGELNRHRTKTPGGRWLPGSLTVREARIMTAILVTAVAAGP
VLAALNPLTHGPFSSATKLIWQPLVTEEHMHLCHTDSTSDACQGALDQLQQHGVGPSVA
NLIPLILTVVLAMGLSRGRLAWILAVLAQLISIAVLMFQLTKLSADSTDLLWSVNAFSV
IVPWLVALAVLVFSRRAFQVKIDTTRISKSLGALMVTWLATAALWILATLFLPHAFHHPH
TLGLAFKELPFRYLPPTIETVLSHQLFPRSPAGWAVFEWTGTLFWLVVAATLYHLLMGVP
SNKAHEDQENAAATLLRSGSGDHL SWMTIWWGNTYWWAPENAGYVAYRVKRGIAITLGEPI
LGPDSSVS KAELAAQFEFASNQGWIVAWYSVCEEFSKERINAGHHTLRVAEEAVLSSAN
ADFKGKHFNQVNRARNRAAKEGVSSIWTTWADLSAEMQHKIITLSEEWVSDKALPEMGFT

LGTVNELSDPDYLLLAIDEEHLHGVTSWLPVYEKGRIVGYTLDMRRDPQGFKSVIEF
LISEAVVIARDHDLEWMSMSGAPLSTPPGVADDGTIGQILELLGRAMPEFYGFRSLAASK
NKFHPEHHGWLYCYRDELSLPSIGLAVAACYLNEFPLPNWLKKTATSAPSHS

>aaRXN00738 TRANSLATE of: rxn00738.seq check: 6764 from: 1 to: 363
CQEETDGGFFDFGRDMRPGERRSYGTLLNDATTQVSHILGNAFTRSGLNAEYANLYGQALV
GMVSMTAQWWLDERTPPKEEVAAHIVNLCWNGLTGMEADPKLTPISSAEGAIFGQEKES

A

>aaRXN00750 TRANSLATE of: rxn00750.seq check: 8593 from: 1 to: 438
MDWSIIINVLAIVATVILTLIIAAALYRGFTRNKIKKLEAIREAQQHERDNPTIRIADLR
GIMDTHHYIYTDVMVTRAHELMITAPAFFDVTLPFAVLIEDTKRAAHDALNGYKDTTVAS
AEKIMLVDAVTAAWTLYSTKANTGST

>aaRXN00762 TRANSLATE of: rxn00762.seq check: 9427 from: 1 to: 876
MNTSDRIKSTQIALDRDLREQALLLLKEVRAVDGVDALSEQFVRGLAEPGLVHSHLIVTL
NSELVGLAAADEETTELAVHPAHRQGGIGKALIDAAPTSSIAHGN TAGAQALASTLRMK
KTRELLVMEISDRALDDSAAYKDPDGITHSSLANAPVEKSVAEAKWLQSNNEAFDWHPEQ
GGWTTHRLAQAQKADWYKDSVFLWLDGEEIVGFHWVKQHSPQLQEIYVVLSSAYRGRG
LGDPLVRLGLHMHMRAHGARKVILYVEAGNTPAVAAYEKLGTVAESHVVEYK

>aaRXN00768 TRANSLATE of: rxn00768.seq check: 4486 from: 1 to: 1119
VGTIEDVANEQIEVANNTDQIPAGYKSPLLSRSGAAEAQGAAGAGTEGVAWHYGSPLVE
QRIFETGTGLVDRSNRKVIKVEGPDAPTFLLNNILSQKVDSENGFTAGALDLDAGGRIQH
TMQVTVVDGVFYLDTSAAEFDTLIGFLTKMIFWSEVTVQEADLAIITLLGQEIAPDAVF
ARRVDWNGPSRIDVAIRRENLEEGVDKLEAGAKLTGLMAYTAERVKALEPAAGVDLDDK
TIPHEIPHWHIGRGEHLGAVHLTKGCGYRGQETVARVDNLGRSPRVLLHLDGSAPLDPV
GAEIKAGARTVGRGLTVVHDADYGPIALGLVKRSALDKELHIDVSVNVDRDLLPAESEE
QRGRAAINKLKGL

>aaRXN00769 TRANSLATE of: rxn00769.seq check: 3734 from: 1 to: 213
MGRGRAKAKQTKVARQLKYSSPMDLDSLQRELANQSPRRSYSDTPDDEDQYAEYADWDE
DDTDNRAYGTN

>aaRXN00771 TRANSLATE of: rxn00771.seq check: 865 from: 1 to: 819
MTNPYEAFIPLKHRTGIEPEHTFEWENKRVHIAARRREAPVRVIVVHGLGTHSGALWPL
VAAIEGADLAAIDLPKTPLYDDWLRLLLESFISSEDDGRPLILIGAGTGGLLCAEAAHRTG
LVAHVIAATCLNPSDQPTRRALFRFSPLTRLIQGRLRNREIPVTRVLNFSKISRSPALSK
LCAADEFGASKITWGFLASYVQHAKLGAVPVTLMHPDHDLLTPVELSLRSLRLKAPT
DVVMLKDCGHFPIEEPFGTTMLETVTSVIARNS

>aaRXN00785 TRANSLATE of: rxn00785.seq check: 7074 from: 1 to: 657
IIATLGVTLVLEARGFLTVASIPILFGIFTPLTSWFVSQQGVAANVSPGVSVEILTAV
YPLAQFLPTLIMVTILVAALIAVVRIILLRRNQESRQVSGELTRRAQREAEANQNAARRA
RAQSTRVQSSKTRNRRAQPTGDTGSQVTVDELIRRSQERRQTVAQRQTERGVFPFTPTPGP
VVAPKPRPSAPEAPAPTDVGERRQAAPKRRTSLDDDLYS

>aaRXN00795 TRANSLATE of: rxn00795.seq check: 1530 from: 1 to: 528
MIISLVVSAIIMLVAVGFTGMCSEFNTGSPENGQVPEVDASTFMSMEARAMTDHATRLPET
PEGWTTNSARRTMVDDTPASVVGVTADGEGYIQLTQTGETVEDAVAGYDTRWRDLSESVD
LDGHDVGIYTSQESDVRDLRVMDLGDARVMVSGAATDEEFNDLLRAVANSEPLPTN

>aaRXN00831 TRANSLATE of: rxn00831.seq check: 2669 from: 1 to: 702
MSALETLQWQDSSVLIVVAHPDDPEYGLSAAVKEWTDAGVEVSYLLTHGEAGIQGLDP
KETGSLRAAEQRAACDVVGVRNLTILNHPDSMLVYNLVLRLKDIAREIRIRKPNVAVVSNF
DVEAYGGLNQADHRVAGLAAIDATRDAANPWAQPELLQEDLQPWGAEVIIAGHPETHHT
MDLAKDSVDAGVASLQAHKEYLAALPDPPKPEEFIPAFLEVEGGYAAAFRVFGR

>aaRXN00835 TRANSLATE of: rxn00835.seq check: 6529 from: 1 to: 954
MAGGLAALLDDVAAITRAAAASLDDVTAMAGKTSVKAAGVVVDDTAVTPQYVQGVKPAPE
LPMIWRIAKGSVLNKIIILPIALLLSAFAPWALTPIMLLGGSYLCFEGAELIWHSLHRR

IKGEQHSTEPKSEQSPKSEDQLVKSAITTDLILSAEIMVISLNQIADQTIWMQAAVLFFV
GIGITALVYGVVGLVKMDDVGLTSLKRDSAGIQKFGRLVKAMPIVLQVISVVGVFAML
WVGGHIMVVGTEELGWELPYHLVHGLESWANGIGGSALGWVGNTFGSLVFGLIWGAITV
VVSVIKKFIPQRAQNSSH

>aaRXN00836 TRANSLATE of: rxn00836.seq check: 6589 from: 1 to: 1716
MYTHSTGTPQLDFDGDYIPLHLFFSAQTAQHFALEVRNVNWHVLRRAIVKPEQGELIVEALLA
PIESATKIGVWVQDEFLGVIAESQFLLNSQLSRIFASGHLISSQLLLTPSKGSLASVLLP
NLKFGLISNDPPRADSHLLPLGRMWRVEPTVHALFEDFSLGSTILFGLRLDLEALIVSYN
GIECGILNFDASALSSAVKFSNANGLTPTVLGHVVRENGETSFEIDVLPLELWSKKQHR
LEVLPKIPRLIPKEADSQNYVKATALLSDEILRPQTLSSKALSLSDTAVKYSHPVACGVGM
FSLFAVIPFDKLSDHSAAMLLAVISLMLFVLALVILFKRIQSTNTQRWNASSVGLLATLP
IIIFLVADTLIPQGSLENHAQPDVQVTTLANRRPSSPTSLDSLALNSPSSPNSSSML
QNSEMFASPPIASGQSPVSTFRSWLDRSILPLTRENSASESAVTALGPSIVQPASESITT
PAQTSQSRHAIDGDDSKTSTGRPAPTNSPIALPPTWIIGPEDPESTDPTAPTEPTPE
SEPVATDEPSETSEQTSPLLARDTPELNRRKQL

>aaRXN00840 TRANSLATE of: rxn00840.seq check: 2272 from: 1 to: 714
VTKTLPRLLTVAAALAIALPATPVASAVTPVEQAFNASSNLSSGLPVDQWGRPNEQFRQQ
IEQAVNQWPWPQEIKNIVSQAMGFITGDGSEGGDIEIPDNAPRIAQFFWPTRENCINGN
SAAVGSFAVPGPADLPLPGAGVGQTSFVFTALGTGPLAEQQSTAMTVQWANLSNFTHGT
TTLSNTGINPDGPSTISGVADTGRGIIVASMSGGLTTSTENGSAFCNFIPTAVVFDVR

>aaRXN00841 TRANSLATE of: rxn00841.seq check: 5409 from: 1 to: 537
MTDLHPVKQEIFNTAESINTDPKGFLEVDTFKVTDFGLYMARGANHPKFGYLESWLLPE
LGLRANIFHFRKGVDERQDYIIDVAEIRVEDNIWTTTRDLYVDLISVCGEPTVMDIDELA
AATSAGLITADDAERAIDATLNAVEGITRGGDDPMQWLRSKGIELTWADASQVELVPAE

>aaRXN00846 TRANSLATE of: rxn00846.seq check: 1812 from: 1 to: 870
MLKNDLSGARVVAVHAHPDDEAITTGGVLADLAARGADVTITCTLGEQGEVIGETFAQL
VNGDADQLGGFRIHELIALYASLEILGVRGIHLGGAGCWRDSCGMVGDPANEPHPRAFIHSGDRA
VEQLKELLAEKPHLLITYGPDGGYGHDPHIRAHEITHAAAGEQRILWAVSDREELEDGL
KAITGLPEGWGRGELSASVDSVLSVELNDEVYATKVESMRAHATQLWIADGVSVRTNPVA
AHAVTQQDNVQVWALSNLIAQPIMRHEHYQLGAGTLPPEGATGVLDGLEF

>aaRXN00850 TRANSLATE of: rxn00850.seq check: 9820 from: 1 to: 828
MANPFSKAWKYLALFDSKIEENADPKVQIQQAIEDAQQRHQELSQQAAAVIGNQRQLEM
QLNRRALAEIEKLQGNTRQAIQLADKARADGDVKKATEYENAAEFAAQILVTAEQSVEDTK
QLHDQALQQADQAKKAVERNSMALQQKVAERTKLLSQLEQAKMQEKVSESLKSMDSLTSG
STPNLDQVREKIERRYANALGQAELASNSVEGRMAEVEQAGVQMAGHSRLEQIRAEAMAGG
SLTAGNKQESIEAPAAGNNVTDDAVAQRMRELGEA

>aaRXN00854 TRANSLATE of: rxn00854.seq check: 1696 from: 1 to: 213
MRLSEFRQLIEDEFGEAKGEWIAHSHVIGALGVTAADVADTGVDLRDVWEQLCIDFSVPE
ERRLGKDEPGF

>aaRXN00855 TRANSLATE of: rxn00855.seq check: 9166 from: 1 to: 285
MTYFAVLYTYNPDSKVAEVRTVHREFIANLHAEGKIVGSGPFVDGDDGALIVIKLEEGS
NLVDAETLMNNDPFHVENVLDNRVIRSWNPVTKDF

>aaRXN00869 TRANSLATE of: rxn00869.seq check: 9381 from: 1 to: 921
MTPPIISPESFEALRRMRAAEPTMVAERFKQRRKRELLGEDGKLFIVAADHPARGALAVG
DNETAMANRYELLERMAIALSRPGVDGVLGTPDIIDDLAALGLLDDKIVVGSMMNRGGLRG
ASFEMDDRYTYGYNVSSMVDRGVDFAKTLVRINLS DAGTAPTLEATAHAVNEAAAAQLPIM
LEPFMSNWVNGKVVDLSTDAVIQSVIAAAGLNDSSYTWMKLPVVEEMERVMESTTMPT
LLLGEGGNDPDPATFASWEHALTLPGVRGLTVGRTLTPQDGDVAAAVDTAARLVHTDIQ
QFTSQSI

>aaRXN00915 TRANSLATE of: rxn00915.seq check: 6638 from: 1 to: 630
MSAAYSQDTILTFLGRGLTAEGIRQTLEDFAETGLVRNLVWIDADSFHESSEVTHLAT
NQDGLPELQRRPFNELVSRRTTKLHIGVINVIDGSEGMLHAEELNPLVGIDSVCSSHQ

IHRSNVMIGAVAATLDEELPILRGYVNLMLAPEDSHSPGTATVTVYRHGFS DHRLPCTAWL
ISPACTDCGKAAHPHQSNSSYLKVPAPFVW

>aaRXN00917 TRANSLATE of: rxn00917.seq check: 3769 from: 1 to: 2679
MVNTLNSKTVNVPRFARGVVAATAALFFGALVSLAPSALAEPPAVEAGASGSLSNLGAC
IADKGTLDVIMIDEETESLIHEARDGVVNANEPGADAQHHRVPAQSFVDELLAKQSDGD
LNTRIRVAGFGQTYKSGATDPDNYGAWTQLDASTVGGVQDEISRFAADRTQEYQYTNYSAL
EGAYQDFTRSGSEDA CRMLVTFETD GALTAQEGADVAEALCAPGGVTDRLRSAGITHIGI
GLSAPTNP SDFSLLRGT TAGGGTCGVEPANGAFFPADNVGGLFAAFREALAIGGETIGET
RAGDPFSFTLDNSVNSVRFTAIKDDLGPNHLVLTAPNGETVELKDSGSSVANSTDVSW
EAESSPVKMDAGSLNLQGGDWKGVWQIQFGIDPAAVDGRVFNSEIQLDLQVLFSGGD
STSGALNLRDDQQLNMQLVGRDGPRIEGSALVDLGFTTRADTGEFAPLAQGIDISGGEL
SFPLDTISQLPAIGTVEARTTITTAGVDDLPGTTLSPI LNTTRITITQRDMPQLPASVRF
TADEDVVTVDIPITGPGKVWIAPGTQLSGVLPDGV DGI AASSTFDSPDNALVLGLDEQGT
IPVELTVSDLRDGLVNGSIPLQISNAEGANETSVDLPTTEGTLSPVINASTFALAFILALV
LSLLIPLLLIYIVRFLSAKVPSSAMSGVRIPVEFSGEALRYAGSTMPDLASQTTATKQVV
VHGDTFNVEGHKLKVQRFQLNPIASPAVIVQTDPSISFDGKQKGTQAKLPLAVQGSWFLT
ASGADPSKMEIALTNLPLEQQQIDRMIAGITSKAPDRARELQKLLDDAATSQPAKVPPR
APAAQGHVEKQAPSFGTGSGGGFGSSNGGGFGSGSGSNDTNGGFGSSGGFGAR

>aaRXN00921 TRANSLATE of: rxn00921.seq check: 1572 from: 1 to: 513
PAAILLDHIVPNFSRDRSLPDIEDWTRSDAQQIFAGIIAGASVQTRSHFMWDLRLAYF
GVALIGDED TYRAFTTTLTVDSVLSFVQLTLQEGRTEDIRRF EKYGEQIAREDLPSILTNA
RAVQQYLGYIDQDI INKKVSRSDVNQIFTEMARAIIRAI SRNNIGKDMRS

>aaRXN00943 TRANSLATE of: rxn00943.seq check: 2288 from: 1 to: 912
MIRKLARMLASVYVADGAETVLNTSAHVEGTQVVLDRIRYVLPKRYAKRISRDPELVTR
VIGGTKVGAGSLLAIGRAPRTSAATLAILTIPNILARNAFWETQDADEKRNRRNGFLTNI
ALLGGLFITSVDTEGKPGVKWRATNATKRGKKQLQALPTKSETEKFGEKASDWFN DTS
KVTEYAYTAQDFVGENKDDWIKSATETAHKVADTVSDYAHKATSYLEENSGDWLEAAQAN
AKTARKSAVKAAGKAQEKANFALQVAEETSGRANKKATKSYDKLQKQADKAIDRAQKKLK
GIEL

>aaRXN00945 TRANSLATE of: rxn00945.seq check: 2895 from: 1 to: 972
MLERLKRDLPLIVLIVLAVIVAIIPVRGVAADWFDVAVKIAIALLFFLYGARLSTQEAL
NGLKHWRHLHTILAITFGIFPLIGIGLEPMTAFVSEDIYRGILFLTLPSTVQSSVAFTS
IAKGNVAGAIVSASLSNLAGVFLTPLLVMLIMSAGGGVHVDSQVFLDIAIQLLL PFILGQ
VCRRWVKNF AANKATKIVDRGSIAMVVYSAFSAGMVAGIWS TVSVLEIYIYLIVFAILLVM
AMLWFTLFMATRLGFNRADSIAIQFCGTTKSLATGLPMAAVIFGGANIGLLILPLMIFHQ
VQLMICAWLAARYGRDAQEQKANA

>aaRXN00946 TRANSLATE of: rxn00946.seq check: 9850 from: 1 to: 774
MTHTLQATNPLDQTAWHAWHFSRNKEAISRTGATSLSATEWISATTLKDAHTFPSLPGRW
YKRGGGVVG AHLPPAFATTGT VQLRPGELLIAEDFTLT VIERLGQFALQVFDARNPKRFE
FHSIAAFPPEEWRIEARFFPEPDTVNTAAADGVIVATPTAGWVHFLKGRLDYRLRVTVQ
KNNLRALFSDNSSTLG VYQHRFVDIPRPDAEGNTIIDFNRAYLP PKALNRKFLCPSPSLN
NHLNLTVEAGEKVVVAGG

>aaRXN00953 TRANSLATE of: rxn00953.seq check: 8687 from: 1 to: 753
MAPPTVGNYIMQSFTQGLQFGVAVAVILFGVRTILGELVPAFQGI AAKVVPGAIPALDAP
IVFPYAQNAVLIGFLSSFVGGVLGLTVLASWLNPAFGVALILPGLVPHFFTGAAGVYGN
ATGGRRGAVFGAFANGLLITFLPAFLLGVLGSFGSENTTFGDADFGWFGIVVGSAAKVEG
AGGLILLIIAAVLLGGAMVFQKRVVNGHWDPA PNRERVEKAEDATPTAGARTYPKIAP
PAGAPTPPARS

>aaRXN00959 TRANSLATE of: rxn00959.seq check: 3462 from: 1 to: 456
MTVIGIILGSLFGVLAVLLIVVGALGWAAKLPGNPVVGIRVPEVRKSQELWDM AHRVAGP
LWVLSGVSFV IASLVAFVASGMMWL VVALGVEAAIAFIGMGAGMAAHTVAMVDAKRIRET
PQAPVSAEIEEAGGVTTITSADYQQDSAEC PQD

>aaRXN00963 TRANSLATE of: rxn00963.seq check: 4671 from: 1 to: 837

MRLATIRTNGTTIAARVESENTATTIEGFANVGELLQESNWRELAENAAGEAVTFENKEL
 DAVVPAPKKIVCVGLNYANHIEKEMGRDLPDPTLFLVKFPDALIGPFDDVVVPEWANKALD
 WEGEMAVIIGKRARRVKQADAAEYIAGYAVMNDYTTRDFQYAAPAKTPQWHQGSLEKSA
 GFGPWWMTTPDSFEFGGELATYLEGEKVQSTPTNDLVFSPEKLEIYITHIYPLDAGDVIVT
 GTPGGVGHARNPQRYIGDGETVKEIAGLGFENKTVFE

>aaRXN00971 TRANSLATE of: rxn00971.seq check: 9758 from: 1 to: 318
 KALSIGTQWAOVMGINHAEAEELDEALSPLINRLREMGFDPTETEEANSLALHSCPFVWN
 DKRPSAFVCAIHAGFIQESLGENNRIQLELKLPLNAPGTCKVHVFE

>aaRXN00991 TRANSLATE of: rxn00991.seq check: 2362 from: 1 to: 1380
 MDILISILSLGFLVLLTASTGLFVAIEFALTGLEKSTVETHVKQKGDSSARAVQRDHQNL
 SFVLGAQLGITITTLATGFLAEPVLAKFFTPALELVGLNESASSAVALLIALLVATTLS
 MVFGEVLVKNWAIITNPLGVARFVHPVNWFMVLPKPFINGMKNKSANFIVRKLGIPEAEEL
 ASARSSQELTALVRSSAESGGLDQNTAAVINRSLQFGDATADEFMTPTSTIESLRATDTV
 NDLIELALETGHSRFPVTEGDLDETIGMVHIKDAFSVVQAERATTMVRDLARKIPVVPAS
 LDGDSVLNAVRSAGSQVILVADEYGGTAGMVTIEDVVEEILGEIHDEHDDSDAERDFQQF
 GASWEVSGLVRIDELEKRVGYVSPDGPYETLGGIMYTVGAIPRVGDVALLPLTDTPTMD
 EFESGFSGRWIARVTVMEDRRIDKAVLTPITHEEAKEYEK

>aaRXN01004 TRANSLATE of: rxn01004.seq check: 9066 from: 1 to: 1062
 VSIWATVLLIIVLLSANAFFVAAEFALISSRRDRDLSLVSQGKGAEKVLYATEHLSIML
 AGAQFGITVCSLILGKVAEPAIAHFIEVPFTSWGVPNDLIHPISFVIALAIITWLHILFG
 EMVPKNIAIAGPETLGMWLAPVLIAFVKITRPLIEFMNWIARLTTLRAFGVEQKNELDSTV
 DPEQLASMISESRSEGLLDAEEHARLSKALRSEQRSIKELVIKDEDVRTLAFGKSGPTLH
 QLEEAHVRETFGRFPVTGRDGSYLGYYIHKDILPRLADPEMDPSETIPRSALRPLSNVDA
 DGLMDDVLDPMHYRSAHMAQVRLKGELLGVITLEDLIEEYVGTVNDWTHESDD

>aaRXN01016 TRANSLATE of: rxn01016.seq check: 586 from: 1 to: 648
 LLPYAIIVGLVILLPSSWLPRWAVAVLGEVSLVPAVVFSGGFLIPSMFLIGSALVRYGVV
 DRAENAPRAMGVFFAVSAAIAIPTLIQARDITSSGFSIVSTVAGLALGGVYISLVLLAL
 HTPIRGALAAVFAPLGRMALTNIGATILMLIGGLIVDLPHSTSWTATVLLAAGILIIQE
 LLSALWLRHYTQGPLGYLWRWVTWGSRSFPLTRSAS

>aaRXN01023 TRANSLATE of: rxn01023.seq check: 9173 from: 1 to: 978
 MSAVNSAGRPPANGGINKTPMIIALVLSIVLVAVLFGARVLLGPAGQQQIAMSGLPAPDA
 ESAECAALLEDLPGEAFGHTRAEIMDPVPPGAAAWSTSDLERVTLRCGVDMFPQYTALAN
 TVDVDGTTWLPVSDMTPGSSLETWYSVNRFPVVAITADDISTDSADNPVAPFSSAVDKLE
 KRQGQPFDAPLTGLSSAGTTCTSLFDALPRQLEVGGDDGTTYERIEEDRMQAAGYSDDAV
 AWDTPGLEPIVIRCGVEPSENYAAGAMLQIDDIPWFEDTILASGTTSSSTWYALGREIDI
 AVSLPQAASSSLITISGFIEDTVPAE

>aaRXN01028 TRANSLATE of: rxn01028.seq check: 7950 from: 1 to: 2049
 VIYPPLTPASEEKFENKITSVAAVSKRPTTLPLYFRADGSPTRGFANFSTGGIHGAENEDR
 FDHDQDLHTVATREFFAILDATLAALYAAHQAEPEADYQIAQDALAWAKNVLSQKLI
 KSPQLYNPETGVTYEWEFVAQAAWWIRNKPVEVILPTGESMTVKHKSVLASASYPLRDNV
 AYWRSEPKTPQLFPVAKSGGSSLEKKYNYTSVGTAIHEDFSSYYPLLLTNMAAFTNADLG
 IDEKTGRPRDRYREIYEQKEIYGAQRKDPSIDEETKQRLGILREGTKLILNSATGAADAG
 HDTPILMNNRVIAMRIIGQLFSWRIGQAQSLAGATIISTNTDGLYSVLDMGTNQRVLDEH
 ATAIGVQIEPEELDIVSKDSNSRAEFLNGYINAAGDLACWDGPNRSNLSLDHPAFVDHVL
 VKYFQLVNNVTVEIPETPELEGVPLALDQPMNRHEVSKIVATMHKEFEPPKLLSFYQNI
 LASSRGSNTFLFSVPYIPATEGEETHPATDTSTIATPTLSFDAYGNKAEVMPTQSTVDRK
 VPSLLQYYTRTFHVRQDTQQAVFDVIGANPVLIAAAKAASISPASADSRRKKGLASTNAD
 PVAKHVLEIAGADVESLRHEKDLKVTKHTGQDPALPVVVFVNQTIWHNPNDVINALLGAI
 DQDAYIDMAISSYNKSWHNIIPA

>aaRXN01069 TRANSLATE of: rxn01069.seq check: 984 from: 1 to: 714
 VNDLPNLKPLPNWTVLATVATTVVLGIGLYVYPSLPDMPVHWNGSGEADNWTPKS
 VGSFSLILIGPGIILLTSLGSMQALLTMQSGVITQRGGAKSANEHRQWETYKATSMHMG
 WYMFVLNALILVMILNEFRPNPLPGGFIIIGLIGIIAATIVLLVLIGKTTTSLAKKYPMPD
 QDGKTWGFYNDPDDNRILVDVTGMGMNYTFNIAHTWGKIFAVLIFAVPVLIVLLTVLL

>aaRXN01071 TRANSLATE of: rxn01071.seq check: 172 from: 1 to: 2064
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 ELVDALAAELGSNFDVETGEALVEQATGMITQALSFVQYFLVAFGLIALLVGTFIANTF
 SMIVAQRMRFEALLRALGAAPGQITRSVVLEATIVGLFGSALGVLGGMGLVAIISAVLNN
 LGMPMGSSVGLTPSAVVVALVLGTVVTVSAWAPARRAGEVKPVEAMRNMETTTMRSMMG
 RTITGGIVLALGIIFAIAGAMMTDSSTATRSILVGIGALFVIVGTFLFSPALSMPPVVGGL
 GKVIGAPFGSVGSLAATNSKRNPRTATTAFALTLGIALVTAIGMLSATMKDAVSDMMAE
 QYTADYILQGPTNGSITMPKESVNDVRDAEGVADVVLVSMNSASVNGQASYSQLGQSVTF
 VADGDLKSVISTESIDGSLDLSNPGVVNTQTFADENGWAVGDTLQLESMGQTIGDIELIG
 TFTGNDAGNMIISESSLADTPAADTAVPQMMLVVGEEGFDKEQLRTNLEDAVADYIVIS
 VKSATEFAGETVAMIDTMNILYALLALSIVVAIIGIINTLALNVIERRQEIGMLRAVGV
 KRGQVRMTITLESVQIAIYGAVIGIAIGLGLGWAFTVMSGEGLDAAVSIPWQVGLMLV
 GSAVGVIAALWPAVKASRTPPLDAITD

>aaRXN01075 TRANSLATE of: rxn01075.seq check: 2212 from: 1 to: 411
 MDNPNVILNEQEALERLQSVSLGRVVRRSDEMDFPVNFIVDKGAIYIRTAEGNKLFMS
 NLNHDVLFEADEVKDGKAWSVVVRATAEIVRKLDEIATADTLELKPWIPTLKSINFARIVP
 NEITGREFTLGEEPERY

>aaRXN01085 TRANSLATE of: rxn01085.seq check: 551 from: 1 to: 879
 RKRGEGLDPNSPEAIEQAKKKGERKARNERCERNFKGGGKDLKQTDRTFDQLRKQRTVD
 KARNRDVHNEQQQLARGEIGEMRSPMWVEVGAAILGVFVLVMMWLAWGGIGLLIQTMMNTG
 SPNDKELFDELGVRPYYVAVEQQIGTSSAHTTCYQPLDEFNGNFGDCTRSVPKEPVWYAD
 YVASVFAEHGFDAPEPIDNSVGSWLLFGHVGIIRVTFVIAVAAGVYAMSRAAMMRQLETQ
 NVAVDTTDINQHTNDARLAIPQEIVRDLSLFPDVGAHFTSPALKHDFPCDAVE

>aaRXN01121 TRANSLATE of: rxn01121.seq check: 3374 from: 1 to: 1086
 MNPEFIHGATEIETTNRGLRPHRLSKEIVERYCDPQFSAMERQPSGVRVVCRTTATSVTL
 TTYSTRVVYLDGRPGGKIDVLIDGAPTSSTPTSGGETTEVNFIATERRRLKDPQVLTV
 DGLSEQEKVVEFWLPHNEEIEVISLKANAALNTVEDTRPVWVINYGSSISHGVSATAPTKI
 WPAIVAQSKNYNLRNFGFGGSAMLDPFMARLIRDTPADLITLEIGINIVNGDVMRRRGLE
 AAVDGFINTIRDGHPTTPIKIVSPFYCPIHEKTPGPGAFDTSSFGSGQIRFIATGEPDEH
 GRLTLEMVREVLEGFVEKQKDPHLTYVDGASLYQASDAPLLDNLHPDEASHALIAQRLLK
 QL

>aaRXN01128 TRANSLATE of: rxn01128.seq check: 7667 from: 1 to: 1014
 MSFTFIRTFVFLFGITLLVSCVPEPPDSYTKESTVLRVQVSDFNLFVELAVALGYLNNI
 ELQVGVSVQGGVESIESLKKDDIDFAAVPFIFGLVAGEIATGAPIKAVAASYGISHDSSSA
 LLVLKDSEIHEVHDLIGKTVGINTLGALGSAMVERHLFDAGLTEPEIVSVTQRALPGEYL
 EQRLYQGVDAIIVWTDSAKHQALETGDFRILAEDSDLVQELNTGCMVVSQKLIDEHPAVV
 GELVDGVAQAEFERSHSPPEEVREVFNYLEAHGQSDRISSFRYWEHSGIATRGGVLSDR
 EFSMWSHWIDRQYDVPDINPASIYTNQFNPKVNPSP

>aaRXN01134 TRANSLATE of: rxn01134.seq check: 3892 from: 1 to: 771
 LSLDQVPYTAQIVPLAVILTLLDAEMATARSWDRLNQFWSGVLGELYGSPAVIARSGR
 DTDQVAAWIREGAGETAVVPKTIRDVTFHESRLSATQDTGVWKGIFALLMGRGARDWRT
 GQQFDRWTFDELGCNFHQIFPTKWCKERGIDPVLTESVLNRTPMGRRTVVIGDTPPSRY
 LSRVQSKSLMGDEEFDQMLDTHLLSAEDLHSSNTTHFFASRRTNFIDMVEDAIGKAVIRD
 VNESDLTGGHDGPSVHG

>aaRXN01140 TRANSLATE of: rxn01140.seq check: 3026 from: 1 to: 933
 MALDTRGEEMRFRPRALSAPDTGKDPGLLLLDGQQRLLTTLHYHCFSGDGYVNTVDFRSKK
 VTRKFYIDVAKAVESPVMSDEAIFSVDETGKIISHFGPVIDGGITDLETALAHGCLPVSV
 LLDDNGTDFLFDLADMAGEGAREHAKRFQSQIVKTLVSYDIPMIRLDRETAKGGIGSIFA
 QANSSGLQMDVFDLLTAVFAADESVETEFSLRDDWVRVERNLRQHSALDGIGSTEFALTAV
 ALLVSARKGHASGYREDILNLTAEYIPAADEMIKGFDEAAEFLRQRCIFESRPGSIHRA
 DCSTGRDPHPA

>aaRXN01148 TRANSLATE of: rxn01148.seq check: 3053 from: 1 to: 600
 MTSPVENVKKKPRPLALSPSRAGDYQQCPLLYRFRAIDRLPEPKTVAQVKGLVHAVLEY

MHKLPREEREYPAMVKQLKPTWAQMCEEDAELKELVPEDELYDFLVDSRTLLRGYFEMEN
PQGFDATECEMYVDTVLPNGVPVRGFDIDRVDTAPPAKSELSTTRLARNQSRSGASKRSSR
CCSMHWSTGACSMKSQLSFV

>aaRXN01153 TRANSLATE of: rxn01153.seq check: 8673 from: 1 to: 543
PFLSPIVSTHVVAYSTARGFGEHRVRWDYAQESPLRDRGFDLRRYHQAPVVDPHAIG
VANVFVPNGARFYVDHAHPEYSSPEVTNAWDAMVYDAAGDHILMQAVSDVASFTSQNRSV
LDGHDPALPKIYKNNVDGKGASYGFHENYLYSRETDFDLAQAALIPFFVCRQVIIGAGR
V

>aaRXN01154 TRANSLATE of: rxn01154.seq check: 4612 from: 1 to: 639
LSKKISLETTLNIRGIINTRDEPHTDADHWGRHLHVIIGDANMSQTANFLKFGMTSLVLDAI
EAGVDFSELKLNKNAVSEVAKVSHDLSTHQLRLADGSELTAIDILRRYLDKVQPFPAETPV
EQRVTALWGEVLGLENLLSTSHLLDWTAKLALIKSFEARGLSINDPKMYLIDLQYSID
DPQKSILYHALVSKGRMKTLCSAQDIADAAATSP

>aaRXN01155 TRANSLATE of: rxn01155.seq check: 3917 from: 1 to: 1470
VESALTRRIMGIETEGYGLTFVDGDSKKLRPDEIARRMFRPIVEKYSSNIFIPNGSRLYL
DVGSHPEYATAECDNLTLINFEKAGDVIADRMVDAEESLAKEDIAGQVYLFKNNVDSV
GNSYGCHEHYLVGRSMPLKALGKRLMPFLITRQLICGAGRIHHPNPLDKGESFPLGYCIS
QRSDHVVWEGVSSATTSRPIINTRDEPHADSHSYRRLHVIVGDANMAEPSIALKVGSTLL
VLEMIEADFGPLSLELANDIASIREISRDATGSTLLSLKDGTTMTALQIQVVFHASKW
LEQRPEPEFGSTNTMARVLDLWGRMLKAIESGDFSEVDTEIDWVKKKLIDRFIQRGN
LGLDDPKLAQVDLTTHDIRPGRGLFSVLQSRGMIKRWTDEAILAAVDTAPDTRAHLRG
RILKAADTLGVPTVDWMRHKVNRPPEQSVELGDPFSLNPPQPAQETALSILLGGTSTY
IAGEIATLTF

>aaRXN01167 TRANSLATE of: rxn01167.seq check: 6639 from: 1 to: 396
MADRVLGRSGRMGAVSYETDRDHLAPRQLVKYKTADGEIYEVFPADDAEIPEEWMCKNGK
LGILMEGEGVESKPVKPPRTHWDMRLRERSIEELDVLLERIEALRKRNRNAKLLKAQQ
EAEAEKAAEEV

>aaRXN01169 TRANSLATE of: rxn01169.seq check: 2636 from: 1 to: 996
LKRVEAWDRFQIPLYITALIAGALVGLQWPGSTGGFESAINPALMALLYATFLGIPITR
IGAALKDLRLVILMSVNFVAVPLVAFALSRIAGDEALLIGFLLVILAPCIDYVIVFAG
LARAQDKLLAATPIILMLVQILLIPVFLAVFVGSDALGSISFGPFVEAFFLLILPLVAA
AGTQQVARKWQVGRTIMAAAEAIMVPLMMLTLFAVIASQVEAVSGQFTDIATVVPLYVAF
LMVMPIGGGISKGLGLGFKEQRAIVFSGATRNSLVVPLALALPAGLEIAAVVVVTQTL
VELIGMVVYVRIIPLIFHEKQTYRKLSGIGES

>aaRXN01173 TRANSLATE of: rxn01173.seq check: 4063 from: 1 to: 615
MHVSTLPNKKLRTRIFAGTAAVALSLGVASCSNAEDAVDSATDAANSATSAAGSAINDAT
GTSSASTTEPSGTSGSDSGSDSAGGDTTEVESADGSTISIPTAVVTAANAAGFSTPESVE
EGPNGESLVTPEGYIVNSAEGGAQALVGMIGETWIGEGGLSAAVGLPTGPPEEATTNGWT
QQFTSGVISWLDGSGQFAASVEPA

>aaRXN01174 TRANSLATE of: rxn01174.seq check: 9196 from: 1 to: 750
MSNMQGNDSKKSSGASRAESPLIKFRTLIIVIFVILIVGLASIAVGPVVYQLIMGPVKVT
EGIQADGAAPASTDMNGTWDVAPGSIPNTTSAGFTFAEILPGEKITSGSTTGVTGEVVI
EDNSLISGLITVNMTHITTDQEKRDINVRTKLFHTDQYPEATFEVTDSDLSALPDTGSI
AQVVIPGELTIHGETKAVEPTFDVLRGTGQVIVASDIEINRLDFGVETPEFIAAKINETG
EINVRIVLEK

>aaRXN01206 TRANSLATE of: rxn01206.seq check: 3690 from: 1 to: 300
VSAENTENTDSPFEISEFDDHRRPLQALKFGSIALIVFTLISLAIWGATRGVPGVSAVV
IGAAGVAGFVLLTALSVLFTTNSNVTTTGAVVLGGWLLKI

>aaRXN01210 TRANSLATE of: rxn01210.seq check: 8240 from: 1 to: 831
MTTSHTARGLOHATPERRKTSFFKTSLFKAEWLQFRNKTLTLMATVFPVGIPLLLFLIG
NGGAESANSFDYFVMYTLFVQFYTVLSMATRRDERVLKRLRTGEARDIDIIGAICFP
GALLTLIFTVVIIPLLMVLGAPAPINLVPIVFAVLIGLLCSALALMTSGFTRNAEAAQM

TSPVPFMLAMGGLGSIRFVFGDSIVADILAYTPFAAISDLVQIGWAGATFADSVGGVEAA
NFAGIFQDMLIPLGILAAWTAAVWAANRYMRWDSYR

>aaRXN01229 TRANSLATE of: rxn01229.seq check: 2418 from: 1 to: 1278
MIISTNTAHLPHLPHVPSHHNRMNTLRAGVLGANDGIVSIAALLLGVATGASDTVVFGA
GLASTIAGAVSMALGEYVSVSSQRDTERVLIKEAKELAEDPTAEHVELSEILHSYGIXX
XXXXXAXXXGXGDALGAHLQLELGIDNEQLTSPLAAAFSSAVAFLLGALLPMVXVFXAP
XGWDAGVXFVVTLVLAXTGFISSXXXGTXPMRXCXXXXXGGXLXXALTXPWXXXXXXAX
XXXXXXXXXXXXXXXXXXXXRRXX
XXXXXXXXXXXXFXXXXXXXXXXPPLSGEILLAGLGGEIGMGEPRIPTTGDLETRGLQCLGKL
GQWPPVGGGGMHRFQRRPGEKGHQATTILHRHPQCDQGVGQLARAHVDQGVPGQQAC
PALRRV

>aaRXN01231 TRANSLATE of: rxn01231.seq check: 7153 from: 1 to: 243
MLGYTFVIFILAPFLILTGIAMAPAIRSRFPWVKLFGGHQGARSLEHFIAMVLMGTGFVIM
HVGLVFWSMATTTWSTWSSAI

>aaRXN01246 TRANSLATE of: rxn01246.seq check: 4104 from: 1 to: 507
MKRTITIAALALTSTLVLSACADNTEGENTDTTTIATTSAPDPTTETTGATDPETETGAA
GEVSAEHNADADIMFAQMMIPHHQQAEMSEILLAKDDIPAIEVIEFTQGVIDAQGPIDRM
NTMLETWEEDPVTGDMGEMDHGMSGMMSEEDMTALEDAQGTRGCPALP

>aaRXN01249 TRANSLATE of: rxn01249.seq check: 8446 from: 1 to: 471
SQIVAVSSHGLTTIQEIDVKRAIAAAALTLALTGCSAADPEPTADGTVSQDTFLTTHGL
AAMDAVEIIDHLDRQKVTERPTDLIASVRADELLLSDDQEVVVDLPDNTYVSIAPYLN
STHDCFYHSLTTCGLDLNEDIHVMITDEATGEVLFD

>aaRXN01251 TRANSLATE of: rxn01251.seq check: 4314 from: 1 to: 309
MTQPDMSQILAAQQAQQLQAAQQEILATTVVGNAGNGLVTVTMAGNGEVSAVTVDPKV
VDPEDVETLQDLLLGAFKDAHNKVANVAEEKMGPLSQGMGGLF

>aaRXN01263 TRANSLATE of: rxn01263.seq check: 84 from: 1 to: 912
LTPYDPTAVNKESEKEAAKNLFGAEALTVDPDAGEVVDVDRVDNFYPTTAKAKRDYPSNYAA
GCHQEVNETSPESCVYGDKNDSFVALVGDSHAGHWLPALEPIAEAQWRLEVYTKSQCP
LISTAIKLGETFYAECYEWNEKLLAKLTGPSAPNHVIVSSQRYASANPLIDSVATGTGVE
GYEMAWNSLKDAGVSI SVLLDTPRPQIDIPECVASNRDNLSECSVHRSVALGTEAHPQOK
TAAQNIDVPVLDLSNWICPEEYCSAVIGNVLVYRDSHHLTATYARSLSSALWNELVASNG
EPFK

>aaRXN01266 TRANSLATE of: rxn01266.seq check: 6088 from: 1 to: 1035
MPKVS VVTGFYNRCEHLERTIESILNQTYSDFELIVFDDASTDGTASRLLELKEKYDDPR
FRFIIHEENKGFVKGLSEAISGAKGQYIAVQGSQDVS LPRRLELQVEFLDANPSVAVGG
AIYNIQEDTGRNPQRFKPIATFDDLLTSNPFTHGEVMYRLDLYKSIGGYRSGFTFAQD
RDLWLRMAKKADLGIIPDFLYHRYTLDDGVSVFPDKTIRQRCFSEAAVRLALMPEEERAL
AYSRLAEAGPTAVVPIADRAVQKFVPKAAIRLCCLYGAPETGLHMARDYIQNPLRRTIVV
LISIIYSSRLIKPLQDILYKSIFKGVSISKPIKSSSLVKFTRRIQOK

>aaRXN01275 TRANSLATE of: rxn01275.seq check: 5209 from: 1 to: 918
MEKIRSPAVQSDALQVFKSALAATVTWWISVNLNLSQLPFLAPWVALMTMQFTVYHTFIS
GIQTAIASVIGVLSFVIGTYLDVSVWTFGLAMVIGLIGARVPKLRAEGIGIATTSIFLL
ASGFDDQQLLYDRILEILLGVAIAINLIIFPPLRDQEANMVVGNLDRRMGEVLQKMA
DELAEKWNIDNADEWLEEINSINNDLEKAWHSVRFRVRESRRVNPRIKIRIQEGRPQPTETS
YESNLTSIDEGIAHLRHLARTLRDTPIIDSDWGSSIPATVGIPYARCSFARRSESGNRS
YPRPAL

>aaRXN01276 TRANSLATE of: rxn01276.seq check: 3553 from: 1 to: 444
VSSELSSGTSSGSEDSSESDISNRDIIFGIAAIAAVGGLIASGVHWAVQQRMIPNPLPG
IIPNPPALAPQAPAPAPAPAPQAVAPQVAPQVAPAPAPVQTNRTYKNCTEVWNVLG
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>aaRXN01281 TRANSLATE of: rxn01281.seq check: 193 from: 1 to: 762

MSIEQAITSLSARVRELKPI-ETEEATKTALI-IPFISNVLGYDVTDPREVIPEYTAADVGV-
KKGEKVDFAIKTDGDDFHFLIECKKVGSPSLSDHANQLVRYFNVTDTFAILTNGEIYQFY
GQLDAANRMDAKPFMTLDLNNI DARQFPHLEMCTRKHFNQPALAAEELKYIAELKKVI
ANQFQEPDVEIVKMLAATVTTKRMTAQNLEFFTRLVNTASSQFLKDEVNRRLRSAQVFED
PVQTQGADAETPAEDEAVIEEVVSEIVTTEEEIHGHSIVRAICCSEVSAQEITMRDAKSY
CAILFQDNNRKPIARFYFDRKIPRIGIFNAEGEQEHFDLESIEDIYNHADLLHSRVVALN
A

LIVDTQFEKIPAHADVVGIRVILSSDELPELFKRGYAEVKKFLRLEGIEPKGPARAYYFGD
VSDTVDILIGFPVSPAQAESLRRGALSQSGGDIDDVVLHHFRDMKTMHSRHSGPFDGVER
VWDEILDEVEDLGCTLPSSSIGWEEYIEGPATADTCOLASEVYVOVCOAPVKSA

MTWEYVVLPA TILLIALSAFFV IIEFALLAARRNRLEETVETSRSRAALRSLNELTLM
AGAQLGITMVT FALGAITKPWVHYALMPLFEWARIPLVMADVIAFILSLFIVTFLHLVIG
EMAPKSWAIAHPETALRTIAIPARGFINLFRPLLQWINKMANDLVRKVGETPVDRAAAGG
YD TDTLHALIEHSRETGALDQQSAAQISGIKLDKITVGGTTLTASPFTHSASATVAEVQA
AAQRSGSLRVLIDAPSHLFPVHIHVRTDLGASPDKEASKWSRPILTVAETDTLHQALEYM
RHNEQISAVLSADGKTVLGVIWTDHILKYLWPSAV

MSNSECHTHGYIEEKQRYLARLKRIEGQTRGIHRMIDEEQYCIDILTQISAVNSALKNVA
FGLIDDHIAHCVKEAADLGGDELDAKLKEVSDAIRFSKA

MAFPVTE DKILAAEETLGRRLPETLRERLLQNNNGGEVIDNENNDWILHPVRDDSDRKRLV
RTANDIIRETESAREWDNFPENAI A IANDGTGDLIILLPDDDAFYIWSHEDEPLIETELE
DA

MLTLTWIAVLVFTVPGLVSVSWVSGLKVPWAIAASIPATFGIYGLSAWLLGLWEMRFDLHS
VVISTLVFAAVALVWRLFFVGGWLVRRRKARIRRTLADDEERAENAEVSAGEPAESSTNE
AAESESETSERGIWRVIFDYM RDGGILDHRWLLPAAGAITGAWLIIDRAVDLLSTEHG
LGDIVQGWVDVHWHASTVRFIDETGIASSTMMQRLNIETQQDLFYPSAWHAGAWVLSDVG
NLTIVEATNLTGIVSLGLLPLAVALIAWRMINNRGLTAQIGAGFAGLITIASPVLFWVG
NYVGAWPVVAAIGASGVVLALFMSTPSVPVIRFAAALAFMGFMQLHPAPSTIVIMVLLW
WLLKLWVVPSQKVKGKAGIGIRLKDVGILAITGIIIGVLFMPLQVVISGSEQTEDVLSYSA
EEQVTRSESWLVISIFMETRHDVDFGNIDIVPVLVFAAIGGVVALVWRGNLWAPVFYFASV
ALTANSLKPFEEPPWGDWLNIVGGLHYSTGHRILMPVAMFTFAAAGIGAAVIRLICLGPI
KKFTTVSGVSVVMALVVAVPLQTWAKDFVEEGSETTILAPHNDERMVSNNDLAAWDWLI
QQPGGADMNIMGDPADGNGWMYAYNGLHSVARHYAWPAAGEGSATAMLFWWPQLLGVGTD
ENPDQVNDVDQAARDLNVGYFMISPWTFWDFQIPNFRQIDLLWQTPGVTPVCKKGDVIF
AVNDMFTDAELDQMRAPNGSNPELPELPTLGELGLAETEDVDQTYYHRPTVPAGVNSEM
PSAETLYAPDPTKPHTVFN

VTFRGGNTGAKHAVVVGSGPNGLTTAAVLAKAGQVDVYEAAPTPGGAARSESVLGEGTI
SDLGAAGHPFGVASPAFHYLGLEDHGLEWAYS PFAMAHPLDYGRAGLLETSLPETAKKLG
PDARRWKNLHQGLTKNIDKHLANLLGPVLKWAHPIRMAKFGFPFALLPAKRLASAAFETE
EARSFIGSAMHSVTPPHKPMTASLGLLFGALGMSRGWPVAVGGSGRIVDALVNVINHHG
GTIHCDSDIDSLSQFRDTHAIILNQTPSQVLKLGKGTDLNAGLPQRMSTWKHGPSSYKV
LLEDEPIWSNAPQVQATTVAHVVGSSIEAFAEAEAGAGRMPEPFIILCQQQVADPSR
EGRHVUYAYNHPVPRGFEVDKRAALLITAOIERAFGERDIRVHSDTNAEDLEAWNPNLVG

GDITAGSALLRRMPTKIGEKTYMASASNAPGGGVHGM PGWAAQAVLADHR

>aaRXN01351 TRANSLATE of: rxn01351.seq check: 2597 from: 1 to: 585
 MTSFLDAPTLQRVTFTGSALGSSSLYTQAAQTLAKTAVDRGIDLVYGGGKVGLMGIVAD
 AFLESGGEAFGVITESLMKGELGHEKLTELEIVPDMHIRKRMAELGDGFIAMPGGAGTL
 EELFEVWTWQQLGIHQKPVALYDVGFWQPLLEMLEQMTQRGFIKRDFFECLIVESDPHA
 LLKAMQWTWTPAPKW

>aaRXN01362 TRANSLATE of: rxn01362.seq check: 8917 from: 1 to: 3654
 KWLGTPAQSLFLIPPVTQHARTGTHLYDSLQLLFTLVDKGHPTDAKAVAFDAEAGEEGL
 HFRNLSADLFLPAATELIDRVGLSNEALNKVLENLLLSRVQSGKDRGFISYATLGVTELG
 QVYEGLSYTGFIQEDLFEVAPHGKADKGSWMLPVSKADEVPADSFEVDQEAPGGGVI
 KVRKRHPRGSFVFRQSSDRERSASFYTPQVLTSTFTVTQAIEELQASKRITTANDVLSLT
 ICEPAMGSGAFAVEAVRQLAELYLELRQELEEQQIPAEDRAKELQKVKAHIALHQVYGV
 LNSTAVELAEISLWLDTMNAEMDAPWYGLHLRNGNSLVGATRSYAPSLNKKAWLTATP
 TRYRLDDIAQAIDENKAEPLFNHGIHFLPSTGWGATADAKDLKDLMAEIKELKSWRT
 SIRASLSKTQIKQLNNLALRVETLWRFLMRIRIAESQISRSTTLWGQEPAEVSEVVTRE
 QIEQDLFGNIDGAYNRLRLVMDAWCALWFWPLDAVATAEHPERPALPDLEWLATLTEIL
 GIDLPLKSKNENQIVLGPDTNWLAINDAEATDLGFSGALSFERVSANHPWINVARQVAKQ
 QSFFHWDLDFAHVFAKGGFDLQVGNPPWVRPDVNFEDLLAEHDPWWAVMSKPTQASKKER
 QKNFHNPKSLEHVVSAGAGEPVATSAILGSVTLYPHLKDQRPDLRGFMEKTWSNASPAG
 AISLIHPESHTEKKAAPLRRGAYERLRRHWQFINELILFDVHDLVKYGVHVGAPQESI
 NFLSAASLYHPQTVLDSFDHDSGNLPLGLKDDNGNWDRRPHKDRIQLVNADTLTVWKSIL
 EDEQTPYLDTRMVTYVNTAAAALEKLASAPRIKELGLQFSSGWNETTDKKGKGFVGVWG
 YPASWSDAILQGPLGVATPMIKQPNPTMKHNQDWSEIDFEAIPANFIPATAYQPDRTK
 PTYDADYGTWTFGDKQVPVADTFRIAWREMAATTGFTVYPSVIPPGANHVHTVNSAASR
 SNLKTILVGAQLGAILSDYFARSSGSSHIFNDIVRKIPLPNFTSLEKQFARTYLRNLCLT
 SAYAPLWEEITGEPWDVQVPLRNAEQRRAAQNDIDAMVALSLGISADELCMIYRTQFPVM
 RRYDQEDHFDANGRKVPKEIIKLQQLKDGQELSVEKRTWVHPQSEVSYTFEYPFRVLDR
 EADLRAAYAKFENQLKEP

>aaRXN01379 TRANSLATE of: rxn01379.seq check: 3028 from: 1 to: 942
 MSAFDSILNVEEWISDHYLTNDDAKGASFSCRVRERIKWKTTEDATQQSGPLTRFSSNR
 LQLQHALSELDDATTAASLVASALGYGVPSARHAQRGSDTISYSSWVGNAGSVEFLAATP
 AESFEENFRSLPLEPVAVNDKPDITAAKLVGQIFLSDTPPAFVVITAGKWVVLAERETW
 PLGRHLAIDISLVVERNDTKAQGEMQQTVVALARENTERAADGTTWWEETIEQSREHAVK
 VSGELRSARESIEILGNDVLTRYEAKELSTAEIDGGELAKQSLRYLYRILFLLFAEASP
 ELEILPTGTPEYDE

>aaRXN01390 TRANSLATE of: rxn01390.seq check: 97 from: 1 to: 657
 MFRRSLPSNKTSSASSASSADTSYSVRLGRPEEPGYQPEPSYSEPYTDSDFAPAGAAAAA
 AAVAPPMIAEQPQIVEDARRGTLDFGLLIIRAVIGVYLIVRGVFTFFTLGGSAGLAGLEA
 EFAGYQWPEILAILLPSIELAAGVFLLLGLMTPVAAAVATVATSFTTLHQVNTHEGGWGE
 LSEPLMLAILITIVVVGLQFTGPGKISLDSGRGWQSVHW

>aaRXN01391 TRANSLATE of: rxn01391.seq check: 3163 from: 1 to: 690
 VAAVAFAAYVIDGGVEEASGTPTSSESSVAATAPAAASSETAAEYRAMLASLDVKGRAPGT
 GYDRELFGPAWTDTVSVEYGHNGCDTRNDILQRDLDDIQLREGTKDCIVTSGLLSDPFSG
 ELIDFVRGERSGDVQIDHLVPLHDAWVKGAQQWDEQTRKNFANDPDNLLAVKGTNLQQKG
 AGDAATWLPNTAFRCDYAKKIITVKDRYNVWVTEAEASALERQLDTCAA

>aaRXN01400 TRANSLATE of: rxn01400.seq check: 8655 from: 1 to: 1500
 MAISVSMPKAISREELERAWLEVIERHGTLRVTFSTGMGGEVQHRIDVGPGKWIDHAVA
 PGESINEALRAVLNRQCSPPSRPSHLCIIIDAHPRPTVIIIGSDHSHVDMWSMLVIVRDLL
 AALDMELPVEPPLAFESHTAELLAAPPAPERIHQRWREILEAGGGKMPQFPLPLGDAISM
 PERVEVRDIFGVNGLAIYSARARAQQVSSLALTISVMADVTAALADLPLRAVFPVHSRFD
 QRWHDVSGWFISNSVIEVPDSDPHTAAQAVREAVSLGSYPLAELLEPWGGMPETPGMFAI
 SWLDLRLRPVSIDDIGLQAQYVSASLRDGVMLWFILDRSGAHLRCRYPDSLVAENVGR
 WIDAIVAQMRAEAGTVNLQAGGEQLTLRHGTRADISEIAPLLARNAADPCELVDLEHALD
 LLTHESHSFLAVVRNARGKIIAAMQLTIVPEFSRGGALHLHIEGPFIIPEYRTDLDKKL
 RAWAVEHGRARGVKVEEVVG

>aaRXN01403 TRANSLATE of: rxn01403.seq check: 3765 from: 1 to: 648
 LVRGRGYFNAVDIYETSTQPDQEFPPDFDFTFSADPTPFQLSAVRADTGETVFWGREDTPD
 LSALMKRVRASSTMPGFMPIYIDGHPYVDGAVGETGGLMLQPAIDAGFTRFFVIASRPR
 DYWRKEIGRPGFIKAALRRFPTIADLTARPALYNSVKQKQILDLEKQGSAYVFFADNMNI
 QNTEINLKKLRASFDAGMQQTRKDWPEIMSFLNQTR

~~>aaRXN01409 TRANSLATE of: rxn01409.seq check: 6984 from: 1 to: 822~~
 WVDFFPDVTARLGYEYMQLTPHVDFGPPFRHPKADDDLVAALKKRAKDAGVTIPALLPVQR
 ISWPEETQORVAAVRNIKRIIQLAVDLEVDTLNTEFSGRPERSEDAFYRSMEELLPLIL
 EKEGIKFNIDPHPDFFVENGIEAWRVIRGLNSKQVGFVYVAPHSFHMGDQAEAILPAVG
 RLGAVYLSDTFDHKKSHGLRYITNPPGNAVRVHQHLKIGDGDVNFEEIFSLLRSTGYLDR
 EDALLVSNVFAEDEAADEVSRVQLEKIRSLIENA

>aaRXN01422 TRANSLATE of: rxn01422.seq check: 4360 from: 1 to: 972
 MAQRKLASVIGAALAASAVLVGLMTPATAQSSGSSSTDITRALTSSGGVADSRAPEGGAK
 VVVFSDSHTSGTNAPFRTDERGCLKGANNWADQLQSQLGLGAGDLIDVSCSGASINSDGF
 HFSDEVRAHAEARGAIGPNTTDFIVQLGKNDQWGLSNVNLQSVQTCCLTDVFAAGCDAAVA
 AGKMQDPNAVTAENYAERMKPVIDYLYAPNAEITLVGYQEYTARSGSQVCVRLGGTPL
 VKNDAPALVSFMNKLMDAIDGAAGILGVSHVDLRSATEGHDSNDPWNVGVFDARAEIV
 GGPWHPSVKGDSVTAGILRDRVNA

>aaRXN01434 TRANSLATE of: rxn01434.seq check: 1389 from: 1 to: 2952
 VLGAULTSLVIPVLTRAEKEDADGGSGFFRRLTLSTLLGGVTILSIIGAPLLTRMMLS
 SEGQVNVVMSTAFAYWLLPQIFFYGLFALFMAVLNTRVFKPGAWAPVNNVITLTVLGV
 YMVLPARLHPHEQVGIFDPQIIFLGVTTLGVVAQCLIMIPYLRRAGIDMRPLWIDARL
 KQFGGMAMAIIVYVAISQFGYIITTRIASIADDAAPFIYQQHWMLLQVPYGIIGVTLT
 IMPRLSRNAADGDDRAVSDQLGSKLTFIALIPIVVFFTAFGVPIANGLFAYGQFDANA
 ANILGWTLFSFAFTLIPYALVLLHLRVFYAREEVWTPTFIIAGITATKVVLSTLLAPLLSS
 SPERVVLLGAANGFSFITGAVIGAYLLRNKLGLLGMRLAKTSLWALGSAAVGAAAWA
 LGWLIQAVVGDFLLGLTSSVGYLLNLAVLGVFFIFVTGIVLSRSGLPEVQNLGQALTRIP
 GLSRFIRPNTKISLDVGEVSEQDFSTQLVAPSEFAATPVPPPMSAGIVRGPRLVPGAPVG
 DGRFRLADHGGVQGARFWQAREIATGKEVALIFVDTSGNAPFAPLSSAAAAGIAYEVQR
 RTKKLASLGLAVAPNIHSEAYRNGCLIVADWVPGSSLSAVAESGADPRAAFAALAELTE
 TIGEAHEMGI PAGLDNKCRIIRINTDGHAVLALPAILPDASELRDAKSLASAAEMLIDATL
 APSDVKAMVTEAQGLATEDNPDYASLAMAMRTCGLFTEEPHLVVKKEKTPKPTRDGF
 ASDYTVKGMAAIAAVVILVSLVAAGTAFLTSFFGSSTNEQSPLASVEATTSATPEPVGP
 PVYLDLDQARTWDDGAGTDVTDVTDGNTSTAWTSTGGDGLLVDLSTPARLDRVILTGTG
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 EVRSSQTSDTNPQMQUIAEVQLVGW

>aaRXN01448 TRANSLATE of: rxn01448.seq check: 5425 from: 1 to: 1167
 MAKKKLGTVARLSELDKSLRNRLLRVRSRLLFIVHSAIGAGVAYWIAVEVIKHGQPFAP
 MSAVILGLSGGDRIKRATELTGCGALGVGLDGLIMQIGTGYWQIFVVVGLALLVASFV
 SPAPLVSNQMAIGGILIATMFPPGDGGSIDRMIDAFIGGGVGILVIALLPSSPLDAGRHO
 VANVLGIAASVLEDVAASLKAKDAAKLNNALALRRSQASVKNLETAASSGKEATTVSPF
 LWGDRARVRSRYRILAPVDNVIRNARVLARRAVVLTEDNDTVSDEQIHVIEEADIALRL
 SDLYEHHKEISEALEIPELVNRLRQLGSEVGEDIAEDRVLSAQVILAQSRSIIVDLLQIC
 GMSRESAVAVLVPTSESPAYPPPELWDDDED

>aaRXN01459 TRANSLATE of: rxn01459.seq check: 4910 from: 1 to: 810
 MNSNGFGFSFGNDDDDDKNRNNDPFGFLFGGNFGFGGQGGAGGPGGLDILNQFGQMLSG
 MGDSMNSPEAGPVNYDLAARIARQQIGRVAPVKDSEKEAVEESLRLAELWLDNATQLPT
 SGHRVEAWNPNWLENTLPVWKRLVSPVAEQMNKAQLENLPEEAREMMGPMSSLMNSMSS
 MNFGVQLGNALGDLAKQTLTGSDFGFLPISPVGVSAVLPGNIAEASKGLNVAPQEMLVYIC
 AREAANASSSTCRGLSSASFPLRNTPSA

>aaRXN01460 TRANSLATE of: rxn01460.seq check: 5642 from: 1 to: 294
 VPWLVERLVSSVEEYAVGLEIDTSHIQEAMGNFQMDNPDPERLQEMMNEIQGMDLSPRIG
 SRNANAVSRLETLLALVEGWVDIVVTQALSERIPSPTP

>aaRXN01471 TRANSLATE of: rxn01471.seq check: 6310 from: 1 to: 807
 MQSFKTLESWPDVNSASVISDGAHVHYGDVDRVFELMSVTKLLATYGFLVAIEEGVFEL
 DSPMGPEGSTVRHLLSHASGVAFDKPVAEKVGERRIYSSAGMDILADAVAAEAEMPFAE
 YLREAVFEPLGMENSELWGSAGHEARSTVADLTKEFGQELTAPTILISPETLAEAFQVQFPE
 LIGTVPGYGMQKPCPWGLGFEIKGQKSPHWTGDLMPENTAGHFGQSGTFFFTVPGSGQVG
 VVLTDRNFGPWAKPLWTA FNDEVWAE LNS

~~>aaRXN01479 TRANSLATE of: rxn01479.seq check: 8990 from: 1 to: 240~~
~~MIQLVIGAAAGYVLGTKAGRKRYHQIKKGYEAAINSPATKSAVNAAARKAIA NKLD PQPRM~~
~~KEVKNLRTADGHEVLEQDQD~~

>aaRXN01484 TRANSLATE of: rxn01484.seq check: 1102 from: 1 to: 546
 VLGT AQYDGVPSRQFAARLRHAAKLWRLHEIQHVYTVGGKLP GDRFTEAEVAREYLIKEG
 VDPDLIFVSAVGN DTVSSYEALDPEKLGRVLIVTDPNHSYRAVRIARRMGFD AKPSPTTY
 SPAKFPSIVYFLTLSHEWGGVVVQDVSRLLGERVPDKVKHLCAQSKVCCALRGVHAMS NF
 GG

>aaRXN01485 TRANSLATE of: rxn01485.seq check: 9216 from: 1 to: 2052
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 TGQISSSDITNIQAAID DVKASEQKVIFVVLSSFDGVD PETWTQQALQANGG NVLIYA
 LAPEERQYGIQGGTQWTD AELDAANNAAFQALSQEDWAGSALALAESV GSSSSSSSSGSSSS
 SSDFSGAWLAAAGVGTVAAGGGIWAYSRSRKKKTSATLEDAREIDPRDTNRLMQLPMET
 LEHLAQEELTSTDDSI RRKEELAIATSEFGPERTSRFNAMNHSTGT LQKA FEIQQR LN
 DSIPESEAEERQSM LVEI ISSCGQADDALDAEAQNFADMRNLLINAGSKLDALTQKSVDLR
 TRLPKAQETLAGLRTRYSAEVLESIDDNVDLASASLDEAEVLPQAYEIESMPAGEQGGGL
 IDAIRHIEHAITTADKLLAGVEHADENISTAKANVADLIQEISDEINEAGQLKQSAGADG
 ARADWASLDDAVRAASAALITASADA EKDPLGTYTELVDVDSALDTQLD LTRATAADQAR
 QLRVFDQQLQSARSQIQKAEDLISTRGRIVKSEARHTLANAQKLYAMAQQNRTRDTRAGI
 DYGRQAAVAAQRASKSAQNDITTYNNRHNSGGGTTGAIVTGMVINSILNSGRGGGFCGGG
 FGFGGGGGFGSGGGGGGGGFRGGRF

>aaRXN01492 TRANSLATE of: rxn01492.seq check: 9162 from: 1 to: 804
 VTTTLWAVSDLHAAVKANADPIENIQPKDPSDWLIVAGDVAERTELVL EILARLRRRFAK
 VIWVPGNHELFSRSADRYQGRDKYSELVEGCRKIDVLT PEDPYLTFGGVTIVPLFTLYDY
 SFRRPGFTVEQAVQAARDRQVM MTDEFSIAPFVDIRAWCWDRLAYSIKRLSKINGPTILI
 NHWPLVVEPTYQMRWQELALWCGTRHTRGWAERYNAEAVIYGHLMHPGITNVNGVKHIEV
 SLGYPREWEHWSQHVWPYPVMEVDNAG

>aaRXN01518 TRANSLATE of: rxn01518.seq check: 9224 from: 1 to: 474
 VAFMQKTSAGWLIATGGFLAAVSAILTWRFGSMTSISITVSITFWLLAVVCGFAGVKVQ
 GRLEGLIGQDKSQMNPVTIAYLAM LGRACAWGGAIFGGVYVGIGSYVIPRAGELSAASN
 DLPGVIA CALGGIALSAAGLYLERSCEAPPPQSGEAIS

>aaRXN01539 TRANSLATE of: rxn01539.seq check: 9014 from: 1 to: 2166
 VVTVAGNEKNKIREERVARRAQAVVEAEISLAAQASEQVREQAEAPDVNEQVEEVSVEVS
 SVQSLTQPKTLGQLHDP RKNMSSSDLASIIGVEQQPVAYGESEEPETLRDVLPRRKLHP
 SEITPSYEVADGEQRSIFGESAPSDFDDLS DVEEFD TSHWVRAGQDDRSDDRLADEAGV
 PRSGAQDVADNEANLSGVDEQLHMRVHAQSFDPIDVAKKERKAAEKKYAKPPKSDNPYL
 ARDAKDAAR KRKINA AHDNFAQEMAQAAMGPLRKGVNTQTVMACCTAAVMWCMSPRMT
 GNVNDMKRKF NKDLEQAKDTKLSKYVSKDFWKS KLTRDKTEKEAKSLSDAFMQQKTAIIS
 NRERIPMSVASAAQT VVRLSDQAYEAMREVD TDGQAI VDAKD VSAQVAEDIDMVVKQGE
 EGLKSKDIYGAARDIVGRMERDPGYAARFNETAFGT VRLGEQRRGMVISKTPTWQFPDG
 AGLSKNAGFVSVREPMGNAQNFADNLAATLATEMRVAGEQYGS DGV RDVVAGFMTATDVS
 ESGLASAKKLLPDFDTRGRSASRV RQIAMAQRTQAAIKVLQDDGNQTAMTTEQVKEVQVW
 AMDQAEKVMQRDHPAILDKFVRKHGQTFGQDADAFVKSITMEKDTSS EYTDAMVRPQENR
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 GY

>aaRXN01549 TRANSLATE of: rxn01549.seq check: 789 from: 1 to: 1659
 VANDFIEPN DAPDAPDNGDSGSSGFVDEAKDKTRSA AQGLGYGALRVGFGTAALAANGAR
 SMGNLAKNLWTRMMGLALSAGTGISAATGGMITARVGAMLAGTGSVLSSVT TIALIVSMI

VVPAGRKDGIIEELCEPPVTANPFTIDAGDMTENAKLVYGALSYLEGMNDQNIAGVLGNFET
ESGIDPTAVEGIFDEPNTIGPRKRAAWDKNFEPQPMGIGLGQWTAGRTQMLLDFAADRNR
DWHYIDVQLAFAISGDNESDRKVFLEMVDNKNSSNSPTAASEYFLREWERPADVAGNAP
IRAEQASKWYAQMGGWQKNSTLGESVIAMADGAAAKSTARDEQDALNDCPEEDRTSGGNT
SAAEAMVTISHPYLADSRGNDGTDIYRIHDEVLTGDPYYASCDRGVATAIRWSGTDDTF
PAGPTAAQYEVVGTGSGRWEEIGNLATMSENLLPGDVLLGAPNHVAMYVSNEVVVMDL
GPGNAEPNAAIGHASLNDSPGLDTLSDLGWGVNFKVFRNTQAETNSVFSGVQIPAGKEI
GEMTNPTRTTPAG

>aaRXN01557 TRANSLATE of: rxn01557.seq check: 9051 from: 1 to: 816
VRSSNPVFSSSLKETQRPQGNPYGGYDNFGGVYQONVAPQKAERPMTVDDVITKTGITLA
VVIIVFALVTFGVWLVPGLGMILTIVGAIGGFITVLVSTFGKKYGSAAVTLIYAVFEGLF
VGGISLLLSGFTVGNANAGGLIGQAVLGTIGVFIGMLFVYKTGAIKVTPKFNRIILTGMV
GVLVLVLGNVWALFTGGASPLRDGGIIAIIIFSLFCIGLAAFSFLSDFDAADRLVREGAP
SKMAWGVALGLAVTLVWLYTEILRLLSYFQNR

>aaRXN01574 TRANSLATE of: rxn01574.seq check: 7504 from: 1 to: 1035
MSNKRIGVVIVSYGHEQDVANLVDTFADQLKTGDRVVVDNRKPWVLKDAVGERLEKHGA
EIIINHONGGFAAGCNVGAHIVDDVLLFFLNPDTVIDDPTLFNSLRRVDEQWAAFMPYL
LLPDSTINSAGNALHISGLSVWTGLDEKPEGSSEVTDISIAGACLAVRVDWVKRLGGM
EELYFMYHEDTDFSARLLLAGGRIGLLHSAYVTHHYDYAKGDYKWIYIERNRHVLLLSVL
PLPLLFLVLPQILGVNLGLWAIAAKEKRVGLKVKSRLRLIRDLPALFKLRRSTQELAEIT
PSQYLAKMEWRLDNPNLGNIGSNKIVATGYKTYKLCMSILKLLA

>aaRXN01589 TRANSLATE of: rxn01589.seq check: 4956 from: 1 to: 1020
MVEQIKDKLGRPIRDLRLSVTDRCNFRCDYCMPEVFGDDFVFLPKNELLTDFDEMARIK
VYAEELGVKKIRITGGPELMRRDLVLIKLNQIDGIEDIGLTTNGLLLKKHKGQKLYDAGL
RRINVSLEDAIDDTLFSINNRIKATTILEQIDYATSIGLNVKVNVIQKGINDDQIIPM
LEYFKDKHIEIRFIEFMDVGNNDNGWDFSKVVTKDEMLTIEQHFEIDPVEPKYFGEVAKY
YRHKDNGVQFGLITSVSQSFCSTCTRARLSSDGKFYGCFLFATVDGFNVKAFIRSGVTDEE
LKEQFKALWQIRDDRYSDERTAQTVANRQRKKINMNYIGG

>aaRXN01590 TRANSLATE of: rxn01590.seq check: 4837 from: 1 to: 6447
WGQKDHWGKAPLGDHDAVRIYRQAEALMKQRAANNKGLDLNDEATYGAIMFASFDDAFAA
DAEAHGCVHRPQFAKVTRRNILNSPQYTAIKSSYDALVQQDLVAQQQQAQALQQAAYEQE
QAAIFQARDQATFQAEQTLAQESVRQSEGVGLPIDPMESYFREYAFYEGVEMFGTWGTH
VDAGVSQFSTSDGRAIRALVDEHLATYEPVEQRGSTQAFFASVNAFAEVAHPAAMPFSA
IAREGEGSKGYQALRHRFDKMVGTAIGPNGLPEGPDLGRRRLPISPYDPRWSDREVVRVH
GTKLLSLSEESVGMIRDLDLATIHLDNDVYEGTHREDDTKGGVRPLTQWVNGEAIWRT
ITENDQMRLPNIGQFMTAKEYRAAASWLRAGLIDTADVASQKIDPNKVMSEDEGIARSEAI
LTYLSDEGVDFRIEPPDREPQQLKVRIEGRIDIRLTDTRANEQWVGRVYDSGTVIKYSAE
QTAEERLRARERMENGDTWTPATDYEPSPTTEVVDLVKFALGREVERQDGKGLVGVPNAR
HPRALEQAQDAYFTKNRSFAMVREGLSIVQDARDRSAGPGKWFNEAKASEWLGNNIALT
RARVAEELGVEELIALSAQYADDDPFMPAFAGEDELMAIKQDYWAMLRGEETDLLNPGVN
RDDYMAAIRDGDHEQIAAMTSAMNAVTVEDRVRQHAALVLDYVGTVEPDVPTGLRFNPV
TVAQHMPASAKSLWSNHDDIIAALRATSITGDELRGDEFYNDVINQQLKFNPEATAQKMN
NPDLDPQLARFGTVIAETISRNGADVVDIAVDDNGVVRWTAQRRVGAKDSRAVDSKGQVR
GERTRHVQGEIGQIFTRGEHGEIVTKFNGGENYMFAPGYTASVVPQKPGETKSLEERTKL
KGYEQVMSEALVYRVREDLMFTERSRVGATTSINSAYKRLYDNRFPVDFERSAEGLSD
EWRAALLETASLRVRYDNSIRDGANVMEDIRAQQRGFDARNDNSRDALVLTGGRNISVLD
VDAGKGFDFPMTGMAANQGSVRYLLPSAKVGADGMITPGDPADRVVAAHPESWAMGFD
PHDRQNMFTSNIMQASAVTGGARTAMIQLGGWNFEDGIIVSADFANTHVIRDTEDEMRPL
VAGDKLSDFHGNKGVLTALVVDPAASDADARAAGLESEVAFFRDNPDLVVMSPFSAISRF
NGGTARELMTNPQDVVFRNDGSTRVQPGASGDLNFIVTHMAVDAKTNVYDEEAVREGQG
RKASSQLAWVLQAQECHEIMEHFYGNVVSALANFQEYLRVTGLDVTPTYGELREGFSESNE
QRNIIEMPSIYDENGELNNRVNRAQVREAFVEQISRAGGVMEIPFQLQLRNGAQLEESPN
NPDYMLPLLSPLHRSDEDLADGSTSRHEYTRYMAIFDTCYKLAEQAKIDALRQEEAQ
HGTLPRAAEKRLSESQKFVDQAQKKVQASFDGIANDIVASRIETKNNVFKDGFSARQSH
SATAVWTGDPRLSVDEVAMNSSMARELGVLNNGYAMVWRDPVIRDDGGVRYLRVVINDDLH
GVAVNPVSVKSFDDGDFDGDVGLVGNLPPKAHEEALSRLTVEANMLDLGDGKRMEGDMTF
YGLTLHDSLDVQVAQHHPAMAENMKVIVSELNRYQREYEAGEISREELLEVNRAMHDDL

NEHYAQAFANRDGLVTLRFDMENHMASVAQCFETGAKGSPGKLKEYATYIGADPAQGFK
 DVGQPTPEALRSHYEGSQKATAIKVLTGTVAGKKEQEMVALCRNLGLTKEAMAASAPAQQ
 SILQAKHDPIDALYRAETLMGPVGDLYQGRKMRRGENEQGRYEWVVRDENHQPIQATKD
 EWVQQYMEMYADDKGMGVSVGVQVEKIAEEFSDEQGYMRVLSHDELPTIPLALDQLA
 YGDKKNRFDLLCEMAKQQVNIYDGDYDFAPRVVRANMKAMEDAARFGIPDVEIQSISAQ
 QSLASFERVPQRSGFRIERRVPAEVTGTGIAAPAPLPDAGVQGNVQQQVPATPPVMPVTP
 PAQQPVSPAQTDFRGVGPPLDQGGKIGNYGHQGPAMGAQQPVVPPQQNIPVHNPPVPQNS
 VPPTPVVPKPGTGNPFTHGANNQFMGRFDTSRYNQQEPPQRQDGGFEL

>aaRXN01592 TRANSLATE of: rxn01592.seq check: 5848 from: 1 to: 1302
 MADNFRSDRNDRSSDRTPRGDRGDRGGYRNSRGNDDRGNRQNRDGESRDRGGYLGDRR
 DNRSGEYRQRDDRRDDRRDNRSDDRGGYRSDRNDDRNSNMRDDRRGGDRSYRNDRS
 RGYRSNDRYDRNDRDDNRDTRGGDRGDRRYDRRDDRRDDRRGGQGRPGGDRRH
 ANRAGAGRDQQRDSLHPQRAGFREERLNTRLNPDLPDIDIKDLDPVLQDLKVLKDN
 ADAVAKHMIMAAATWLADDPQLALRHARAADKDRAGRVSVVRETNGIAAYHAGEWKEALSEL
 RAARMMSGPGGLIIVMADDCERGLGRPEKAIELAREEDLSSLDQDNLIELAIIVVAGARHDL
 GQHDSAIVELQKVNPSLKSTGFTHSRLSYAYADALVLAGRGDEAREWFQHAATLDEDDGYL
 DAEERIEQLDNGNN

>aaRXN01597 TRANSLATE of: rxn01597.seq check: 4048 from: 1 to: 1182
 MSLFNKADPLGLQGATRICTPQGGKGLKRLSEGDLAIIDAPDLRSTFAQRLLAAKPAAVL
 NVSRFTTGSVPNFGPQMLIDGGIQLVEGFGQELLDGTKDGKKGRLTEDGQLFYGERLISN
 GSVLSGPAAENAFADAQQSLDRMEAYFGNTIQFIHSEAPLLIDGLGIPDTGNAIEGRKV
 LIASPGDNHRSRLKELRSFIREYDPVLIGVDGAADTLVELGYKPALIVGNPTGIGADALR
 SGANVILPADPDGHAVGLERIQDLGIGAMTFPSSVNSSTDLALLLADFHNPMIVNVGGP
 VTLDGVFENREDSIPAALLTRAKLGTCLVDGSLVSLYTVRSSSNLGMWALLAILVLA
 VVIVIAGTAGSGSFTDNLIDTWNFSALTVQGWFK

>aaRXN01598 TRANSLATE of: rxn01598.seq check: 5340 from: 1 to: 963
 MAKRRGRGAATFAALGFGAAAGIAFGTYVLAPNLPENIDPNAPTSaelVEAETLAEVNAV
 QADQADSIIDHIVEDVAGTLTDRPVLVMRTADAEESDVADVSWLLQAGAINAGSITLE
 ENFFSQDGADQLKSIVANTLPAGAQLSETQLDPGTHAGEALGAALLNPETGEPLASTAE
 RGLLLNVLRDNGYISYEDGTILPGQVIVMITGSDSGSGDGAFAAETQSLFARALDAQSG
 VVAGRIHTAADTVIGRLRANPDAAENVSTIDSVNRTWGMATVLSVREELAGRSGAFG
 SAASADAASPSLDGTAAAPAQ

>aaRXN01618 TRANSLATE of: rxn01618.seq check: 189 from: 1 to: 384
 MIIIGAVFAILAVLLHVFIIFYMESFAWTSEKARGVFGTTEIDAENTKEMAYNQGFYNFFL
 AVIAGVGVAFLFAGSTGIGAALALAGTGSMIAAAVLAALSSPDKRGAAFKQGTFFLLAVV
 FLVIGLLV

>aaRXN01634 TRANSLATE of: rxn01634.seq check: 2339 from: 1 to: 552
 MAVGQETDLLNAMETLAGVPSDLVVTEILPDTSYDNFEFFEVHNTGSAPVTIGEGETTF
 AYSFDDSDATSRDKALDLGGEVTVDAGETIVVWIEYSSSTVDTAAFSEQDFRDFYGMDS
 ARIFRATGQAGLANGGDRGIRVLYNGEVSGWSHYPSDSAQKIDFALPKVGEQASIAS
 AHQN

>aaRXN01635 TRANSLATE of: rxn01635.seq check: 47 from: 1 to: 741
 LIPGGLDTPEEPEAPEDSLFEGRTPPRDASTRILITELMVNSTNMGSSDGFYVEITNTT
 AEPIDFSDYTLNLYPQDEFTNTNEAVWAAEPGDVVIQPGKSLVFWIKNGPNDEATAADF
 NAEYGTNLEAGKDLVEISSGGMANGTARGMQIQTNTGHIVNRGFYNMAGASDVKANEGHL
 FAVDESDLLKQTLVGSGAPTPTGTVYTSQIPNPLSAVIADSSVPLITDNTATSINPAEPFT
 FAFKYHR

>aaRXN01638 TRANSLATE of: rxn01638.seq check: 2292 from: 1 to: 900
 MSTQTITITVLETATIFDGPETIYRYDLAAEGILDGWAHSAVLQVQKIAGENWPTVEIV
 VDGTDNVVALNLSMFASKGVTCGGVGVEAPPVAEPPKIKRPTSGKQVRQFYGIKPLHLL
 LVSILVGSIAGIWVISGFTGPVDSRPVDKVAEISTQGETSISNQPPQPTVLVTEDLLIE
 APFGFEMRSDEQSYLEGPDNLRHVGVDPHAGADAALVAEELRRLITEDPSLEEIPAG
 EWGEKTTIDYRETGDSHVLWVTFWDTDRQLNVGCHSKAAETLVHKAQCRNVIEHLTK

>aaRXN01647 TRANSLATE of: rxn01647.seq check: 6883 from: 1 to: 1170
 MGDVIRMIHDP LGRRRRRALVFGVACVMLAVGSLALAI FRPAKDPADAPLIRSESGALFVQ
 LDGSHVHPVANVASARLIVGEPVDPVNASDAI IAGMPRGVPVGVDPDAPGLFSSTEEPEQDW
 FVCQDVGTGDLHITVPRGGLGPTLIAEGNGWLGASKSETGEVTWNLTADGRRELPAWGS
 EHGRIMRRHLGISEDTPRVYLTTELLNAIPEHDAVRFPAPLPELVDASTRNWLRLD GALA
 EITPLQRLGLIDAGSGVFDPDPTALLGVHEETANTLTLP EQTVSWQDLDDGGFACADGEGQI
 GFLETLESGVALSGDSRAKSFSTNAGGAVGVD SGFGYYVVSDFGLMHPVSTGESMVALGI
 TDVQVVPWSVLRLLPQGSELAKETALAPTY

>aaRXN01658 TRANSLATE of: rxn01658.seq check: 7999 from: 1 to: 1833
 DPQILSPFTTQQQLRNFGFPDQLAMDRFEVDGKLRDFVVAARELDPNALQQNQDWIN
 RHTVYTHGNFIAAQANQVDEVARDVGSTRGGYPVYTVSD LQSNARAAESED AEELGIKV
 DEPRVYYPGLIASATDGADYAIVGDTGDGPVEYD TDTSSYTYEGAGVDIGNMVNRAMFA
 LRYQEMNMLLSDRVGSESKILFERDPRSRVEKVAPWLT TDSKTYPTVIDGRIKWIVDGYT
 TLDLSPYSTRTSLTEATQDAVMPDGT PQPLITDRVGYIRNSVKAVVDAYDGTVELYEFDT
 EDPVLKAWRGVFPDTPVKDGSEISDELRAHLRYPEDLFKVQRDMLAKYNVDDSGTFFTTNDA
 FWSVPGDPTAAEGRQELKQPPYYVVAADPETGESSFQLITPFRGLQREYLSAHMSASSDP
 VTYGEITVRVLPTDSVTQGPQAQDAMMSSDQVAQDQTLWRGSNDLHNGNLLTLPVGGGE
 ILYVEPIYSQRKDQASAFPKLLRVLVIFYKGQVGYAPTIAEALSQVGIDPKEAQDIEEVDG
 TATTPSTDETD TDPATETPTAPVSEAEGIAAINDALS NLEAARDSSFEEYGRALDAL
 DRAVDSYQSAQ

>aaRXN01659 TRANSLATE of: rxn01659.seq check: 8569 from: 1 to: 546
 VAGVAQRVDERIHVGLDSMPEAVTAVWMESDWVLAETIKGSTPSDWEEILRPLALLTDA
 SFTLPPRSTRAQTLDLKHLEPSRLKPEQPEKPAFTPNASEEDLSQPLVIRPEEPLQMPVR
 GVQESRGVVEPRSLGADDVESIAEGDPERPSDLYGTRVLRDLNGQSSIFQDSTDADPEPK
 KW

>aaRXN01663 TRANSLATE of: rxn01663.seq check: 7844 from: 1 to: 858
 MEISVLIIAALILVAGIVLWRADSSKQAAKKAESPVGSVAPAPVLVEEPPDPEFEPELDP
 EPEAQPEPELEVAPRFAPEPVQDLEPDQAEDIYFDDSPELDADVENALAE LTEVEDYPEE
 PVQSEQPQAPATAEVAADDEEQRGVDKHSFLSSLPQSRRERRNWA AKHHFDFIKEDAFLT
 DEWSRGAASTGAVARDVVSMAEGYETHLVDLAGVPVMAMRRGITSDVVIDARRGEQPAD
 PEREESDDLVEIDTVSGFRLLSTWRGLRSVLTSAFTSVWIPCQKL

>aaRXN01669 TRANSLATE of: rxn01669.seq check: 9448 from: 1 to: 915
 LYEIFVPHSHDTADSIDDAMEANSEGIRALKFSLVLMLLTTVLQAIIVSFGSVALLADT
 VHNLSDALTAIPLWIAFILSRRAATQKYTYGFNRAEDLAGLFIVAMIALSAIVA AWQAID
 RMINPRPMENIEWVIAAGVIGFLGNEAVAMYRIRVGKRIGSAALVADGVHARTDGFTSLA
 VVAGGVGVFLGFPLADPIIGLIISAMIATLLVGTIRSVGRRLMDGIEPELVEKATHAIWH
 VKEIESIDRLRLRWVGHRLHGDATVSTSTSSLS EATAIALEAELSVKQHLPNVDEMTVTI
 TPSKP

>aaRXN01672 TRANSLATE of: rxn01672.seq check: 2451 from: 1 to: 342
 MASREVSITRISPLATFRVALAMSIIGLVAWII CVTVLYFGLNVAGVWQNFNDVIGGVGA
 EQTITFGLVLSISALLGAIGAITVAVLAPLCAI IYNSIVDLFGGLQIQIQEEVD

>aaRXN01694 TRANSLATE of: rxn01694.seq check: 8929 from: 1 to: 900
 MQKITPNIW CQGTADAEAEFYVNAFSEFPGGAEVLT TVKYPEAGLLDFQEPFAGKTLTVE
 LAISGFKIILINAGEEFTPNPSISFMVNFDAVRDENAKEHLDAVWEKLHEGGSTLMPVDT
 YPFSEYYGWVQDKYGVSWQLMLSRPEEKPGPAVIPTLLFGGAAQNQAGPAQENYVEVFPN
 SQLGDRAPYGQQTGPATPEALMFSQFQLDGQWIFAMDSGVEQDFTFSEGVSLMYEAHGQE
 ELDAIWNALS AVPEAEACGWLKDKFGVSWQIVPDNMEELMAKPGAYEKLAMKKINIAEF

>aaRXN01696 TRANSLATE of: rxn01696.seq check: 7405 from: 1 to: 1179
 LSTPIGLGLPPTPPVLAPRRKTRQLMVGVGVGSDHPISVQSM TTTKTHDINGTLQQIA
 QLTATGCDIVRVACPKTVDAEALPIIAKKSPIPIADIHFQPKYIFAAIDAGCAAVRVNP
 GNIKEFDGRVKEVAKAAGDAGIPIRIGVNGGSLDKRILDKYHGKATPEALVESAMWEAGL
 FEEHGFGDIAISVKHSDPVLMEAYRQLAEQSDYPLHLGVTEAGPKFMGTIKSSVAFGAL
 LSQGIGDTIRVSLSADPVEEIKVGDIQLQSLNLRPRKLEIVSCPSCGRAQVDVYSLAEV
 TEALDGMVEPLRVAVMGCVVNGPGEARDADLGVASGNKGQIFVKGEVIKTV PESQIVET

LIEEAMRIAEEMDPEVLAAASASGMKAEVKVTK

>aaRXN01697 TRANSLATE of: rxn01697.seq check: 2521 from: 1 to: 957
 MFQGLKELTAAKGRTLLITVTVGLIAVLVTFLSALTAGLGHQSVSALKYLAGDNELILAD
 SGSTTSLASTLSDQAVAQLEDEGAQMLWQVRDRVADTPTMLLNSPDLAPGEVSLPAELAD
 SELATAHDVVDSSNDLYLDHLPVVMNTSDLASLAQVRGVTGPAGAFASDVALPSDTVAL
 SGSERWNASASYQGEQMSLNLMIIVLYVISALVLGAFFTVWTIQRLRGIAISSALGAARR
 VLIADALGQAIIVLGIGITAGTLITVISAEGMGDAMPVVISSTTLFPALILAAAGLIGA
 AISLGPILRVEPRSA LMNA

>aaRXN01701 TRANSLATE of: rxn01701.seq check: 3619 from: 1 to: 372
 MLSHEEIVAI AEDLLSKRYGGVQTLSDVEQLNGSGTSAVLRARVANSFPFLQQRSVVLKYV
 PSTGDVFDSDSALVREIVSYQFTTSLSEDVRPGPVILAYDIDKRILVISDSGNGDTFADLI
 DQRP

>aaRXN01703 TRANSLATE of: rxn01703.seq check: 3504 from: 1 to: 1113
 VAWPSNAKEKLFHWHYWWQAHYLDCLVDAARRRTTKARRDRIRDITRGISVRNVGKLT
 NRYDDKAWLALALGRAGKVRKVRTPKSLPSLEQNIVDGDIDSLTGVLPRSGETFFYNVPS
 NGPAAIMMARTDRLDEAMKITDWIFDNLIDGDGLVMDGLMRMHGPELVRSIHYPYQCGVA
 IGACLEIALKLRLERAGLTTTVDHWSADKAEDSLKYFAHIHAVVQAVSRKMTNFHGV
 WDTGDGDGGLFKGILVRYLADVAILRPDDSPNRETAKIAARLVESAESVWNHRLEVDG
 LPVFATDWTTDARLPQNFGLSSSSSLDLSVSVVRVDERDLSVQLSGWMLMEAAAKVAEELE
 NNGNSYTGSR

>aaRXN01709 TRANSLATE of: rxn01709.seq check: 6991 from: 1 to: 432
 VFEQALGLTTLAQTAGAGAAGGLGFMAMALLSAGMRSGVDMILNETGGEKMLAQADLVIT
 GEGRIDAQTLGSKAPTGI AKRRAKGI PVLA VCGQSLLGPAISNELFEDIYSFTDFESDI
 NECIRNPLPILEGIGFNI AKHHL

>aaRXN01711 TRANSLATE of: rxn01711.seq check: 1589 from: 1 to: 1158
 MLLMAHRFFVLAINGAVTDDFTTVYSALRRFVEGIPVYNEVYHFVDPHYLYNPGATLLLA
 PLGYITHFTLARWMFIAVNLLAIVLAFGLLTRLSGWALRSMVWPIAIALAMLTETVQNTL
 IFSNINGILLMLAIFLWCVVHKKSWLGGVLIGLAILIKPMFLPLLFLPLVKKQWGSIL
 GILTPVIFNAVAVFLVPGASEYVTRTMPYLGETRDFANSSLPGLAIYFGMPTWMEITWFL
 IFGAMVGLAVLALLRFRNTEPYFWAATTGVLTLTGVFLLSSLGQMYYSMMIFPMIFTLG
 SRSVFHNWVAWVAAYFLLSPDTFTSQRLPDVARWMEFFSATVGWGLLIVVTFVSALIWFI
 GDIRAKGTPSSPITTDPTHDLERTA

>aaRXN01721 TRANSLATE of: rxn01721.seq check: 7358 from: 1 to: 1023
 VLVDVRFGRIDLRVSLTDRCNLRCTYCMPEAGLEWLPTEQTLNDAEVLRLIRIAVVKLG
 IRQIRFTGGEPLLRKNLEDIAGTAALRTDEGEKVHIALTTNGLGLDKRIAGLKEAGLDR
 VNISLDTIDAERYVSLTKRDLRSGVLASIDAAVAAGLHPVKINAVMPGVNEVDIVPLAE
 YCISKGSQRLRFIEQMPLGPREQWKRGDMVTAEELARLEEKFTLSPAKEPRGAAPALWN
 VVDKSNPDITGIGIIASVTHPFCGDCDRSLTTDGTIRNCLFSRTETPLRDALRDGASD
 DELAQLWAGAMWEKKPGHGIDDEGFLQPDPRMSAIGASPYQ

>aaRXN01734 TRANSLATE of: rxn01734.seq check: 3461 from: 1 to: 534
 MTDPIEQAFERIRAEAMRRNGSVPD LNKNDAFRPPAPKGGVEKRKKGRASGLDGRQKRY
 VRGAESLGSVLNKEIQRRGWGKDIAGGWVTSNWEELVGAKIAQHTRVEMIKDKKLFITCD
 STAWATNLRRMQRQILQVIAEKVGPNIITELRIFGPQAPSWRKGPLHVKGGRPRDTYG

>aaRXN01742 TRANSLATE of: rxn01742.seq check: 7621 from: 1 to: 504
 MQEKPEMPAIEVIRSAKRTKTQARIVDGGIQVRIPARMSKAEEEEKAVGEIVAKLKRRTQ
 SAVSSDADLIERAHKLNTVLEGRARVESIRVWSNQKGRWGSCTVATAEIRISDRCLKHVP
 DYVLDAVLVHELTHTFIAGHSAEFWEWADKTPLAERAKGYLEAYQRWG

>aaRXN01754 TRANSLATE of: rxn01754.seq check: 1605 from: 1 to: 1941
 VKIKSVFLSTALSASLLLGITPPVLGATINPSLPLSALSSSDDIAVPNFAKELPLAFDVP
 AGTVPQSLSGTLQIPAEFSGGVVEFYDGDRLFHTLRLEVNDRAHIEVPLQSVPVEDGRA
 TFWLRAMLDPVNNQWCYEEQEVRFLDGNVTFEGATINPAVVADYFSPVLRALTIYVPENP
 SEAVQEATLEVATSLDSVYRRSGLDVNVETLPTGTDA PPTRPQDFERQIVLVDEATESNT

QKTELVPNGQDNAFLRLNGNADELYDQARLLTDATLPLAVDTEVTASGFGDVPNLSTDVA
TLQELGITQLTSESVAARTSVTLGIERSRLRTYSQSMDLHITGTYTLPFPQAGQITFSIG
DTVLDSLTTDDTGIIIDREFNVPGDLVNRYTAIVVEFTSTGDNVCGVTQPVGLNIDSDSLV
TSQHSVPVVLNGFRSLPQSFPQPRVDVAFADPSVQELSRASVSVLGIQSMSSQIRIRPHLVN
WDEAVASERPTIFIDAAGAKTDQVPSYLAQQGQTEITSKNQDNADGEQLTRSLQTNAAAL
VVGSIQAVWDADKKRTVIVASSQDNPPDLALISWMGEDRERWSDNLGDLIVKVRDREP
QLTTVEAPDQPGRSATAFIAIGVSLVIALIVAASVSVRRSQKGYK

>aaRXN01761 TRANSLATE of: rxn01761.seq check: 9482 from: 1 to: 4464
VTATVLEPQPVLQSEQDVDAEIARMELKHNRHKTWRRRTMAVVMTLLISVGLSFGAFGNK
EREANAFASAIIAQVVGAMGEVAFEAICPSDGDTEMLLKICITENLGEMHIEKCLEADV
LKCFYDAKNEEQKEQNLKAPDYSMYRMASAMASFYGNRAATAGVEEGPNEFLDSED
AGLKVWEGILSKAANGNVLYADAKHNEDSGWFFGNGVANNEKTSYDLSADHAFQGPY
HFALFGATLSGLGFDSSKAEDSQTDFAQRKMGYAMMIAYIISGGIDLVFNTVLNLI
NPFRLLVGPVSQNTNKTFTENMAGGQTTEGTPFEGMTDFGLIYNWSVTVGWLIGIPVSI
GLFMMGALMFRMRMDKGSFAKKVIRVVYGVVGLPLLGVSYTGALDSFLDSGSSTSAGSNA
TKIVLSTYVDFQSWAENTRMRVPDKVTLAWSLEDQAPTQSMRMVRNSALEINAQSNESF
TTFKNPGSMDLGYSMWMEKMDPANSMTDGTSSSSATTIFQGTIALLSRYIDNDSISSG
SFETSIRSAMESLTSKEGSGEAVAGGDVMAVVTGYNTASGLNEITAAELADANNPLLEVS
DSAGLQGRPIDRNAVSFKSGDATASCNSVVTGSRVVG DYRSDCNMSPLTMYNFLNTSF
HPADASVFSTSTSASSYTRASHAVSLIGSGAMNFVYWFSAWSLMSFIVIGIGYAGAML
FNTIRRTLSLIGAVPFAAMGFIAGVAKVIVYTIAMLVEVIGTIILYQLITRFLMAVPALF
EQPLADSLSSNESAEVLVAGAGMGLVGMALATSGNWAIAGMVITVASSMGVIFTIIMKV
RGSLSVSGVDETVTSVINRFLDTQVSSAGATSGDGMRRRAATGLGIGATHMVLNRDGDG
GSDSGSGSGSGSDSGLGEKAAGLAKVVTVAGAGLVGKYATDALDNYADGVINGDGDGA
FAAGGDATVDGDYVADGDAIASADANADFVDGVVDGAGRASFNSAAYSSDGTTLDEGAS
VDAQGNPLHADGTPMSAAEAEMKMAGLSSSGTMMEKSGVKSSGITTAADVMDQSLASSV
TESGLSKIPTYGADVSGAAGTVGTGADYSATDSSAGLNMSEALQSGTPMGALAGGSV
SSSDQAMNDAALQIAASQGLAPAGSIAGMEQLSAQATEAPAGKAGKQLGDLSGSALNTQL
ASMGGQVGDVSNAYAAAGMGVDVAGKVTEAAQHLQVPGQIQNAVTNADAGSSGASFG
QMAQGAAGIAGVAGVIGAAGAASSAAQAGTVQAGMNAAGAGMINNAVSGGATGSTGA
AHVVNASHGVPVAPGQAHYQESGHAQAFVQNNQANTAHTANTRAPSSAQIMGANVAGSLAS
QAVRGIGQPGQMGANVRDAMGSGRSGRGGATQGGRGARSGVSAKNGIRAQRGQKPSV
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>aaRXN01765 TRANSLATE of: rxn01765.seq check: 8067 from: 1 to: 942
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ADIYREHKMAAVVFTIDARTQMGHLPNSIDDLVASCARNNDVLIPFGSVDPRTGEDALVE
ARRQVEELGVRGFKFHPVQGFDPSEAFYPLWELLESFGLPCVFHTGQNGMGAGLPGR
GIKLRFSNPMILLDDVAADFPNLTIIMAHPSVPWQDEANSIATHKANVFIDLSGWSPKYFP
ESLVRQSNNVLSKKVLFGTDFPLITPEKWLAFAFANPLKDEVPRGILKDNVAVKVLGLAAS
TERGSQAQKVVQHA

>aaRXN01767 TRANSLATE of: rxn01767.seq check: 5940 from: 1 to: 465
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VRTGHLTEEEAGSREEDASPDADDYPTWALNSHLDYGLGAFGDIAEEVNSERVNRDNA
IEQIRAWLDELPGSLFNNLRSTKTGYIELFETYLD

>aaRXN01769 TRANSLATE of: rxn01769.seq check: 4062 from: 1 to: 441
VTGLLGRAPHSLFFPIGFYTPMTSITTTDTPLYTALPHTRISDAELLTPTTTVEILVY
GPAECPGCTATLDFFARKNMPATKVTVAGDVAHTYITQDLGYLQAPIVTVRISSASNH
DNEHNTQILHWSGVNRYLMQALSRTHF

>aaRXN01771 TRANSLATE of: rxn01771.seq check: 4536 from: 1 to: 702
MHQAGQLINDPSQGLWRTSALRSPVARVGHAVLRQRAGEISRMQGREFSRPGDQFRQVDL
RRRLIQVHPQSIPTADAMAVTITMALTAATIDPVKFVADSQNPDEEIIYLAQIALREMVI
AMPLEDFIGVRIDLEPVLVAAQAAKNVGVVESSILLKDLNLPQEYSGALQESIVAKIQA
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>aaRXN01774 TRANSLATE of: rxn01774.seq check: 7116 from: 1 to: 726
MSPNFQARGTTAPTVALSMRQIAHIREEIKKSPLAASVFITPTTKQMVVRDLESFLQQLY

HTDLPEPSIKDSGLISAIGSSAGNTNNPALALETQMAYHLVLAMHHTDVATWHKVVTKNI
TESAAAQDAAVEHSAKYDAVYDAAQLMGITVEEGNVGSIAIAFSTARADGKSDWCVSGIS
RYIEVTEALDAARAVTKNTDALNK TALPDVQPAPVVHSAQFMNKS AHDHGVNTAEKDQPT
LF

>aaRXN01787 TRANSLATE of: rxn01787.seq check: 474 from: 1 to: 693
MSNNALLVANEADIGLYLHWNGGRDSIEAFLAYAAAYQLPPINENNNDWLPPFITVLKNFF
GNDGSGVYLEPVNQDYLDGIDYDNGVYMLDDYEITERINPPAVEQDSHDLHDMLIKIDKA
QPPVDQLGSFLHGLETSVADLGVGDRVFLPRFSTFDKKGRLGRIHTVLGFAENDPFNPMT
SSERFKGKPYVDMFDNQDNAPNPNSYITTDTVRIVVDPVPETNPDEKAGR

>aaRXN01796 TRANSLATE of: rxn01796.seq check: 303 from: 1 to: 774
LLLGGNPAEIDQVLGGDQTQIESGESTGAGDFDHCQTGADANASDDCRLYYTSFSVNEMW
QTLLPAQAGIEYTEPTLTFLKNSTQTGCGFASASTGPFYCPSDQDAYFDLTFFDQMRQFG
AENAPLAQMYIVAHEYGHVQNLEGTGLGSNYNDPGADSNVAKIELQADCYAGIWANHSS
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TGQMSACDFLGRGVYNDA

>aaRXN01803 TRANSLATE of: rxn01803.seq check: 8304 from: 1 to: 960
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GKGSIAKRITQYLNPRSARIEALPTNSREKQWYFQRYIEKLPTAGEIVIFDRSWYNRA
GVERVMGFCTSQEYRRFLHQAPIFERLLVEDGIHLRKYWFSVSDEEQIERFEDRLSDPLR
RWKLS PMDLQSITRWEDYSRAKDEMFHTDIPSAPWYTVESEDKKRSRINVISHLSTIP
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>aaRXN01809 TRANSLATE of: rxn01809.seq check: 4529 from: 1 to: 1176
MNEQEREAELEDALEEAALADELALEAEAGVQGSVEPYDYAADLDEDEDEFDEDPFAQDE
PRDAGPLGELSSDNHVSEAVAEDTGTSTEEA QEGSHEESVDNPRDFTGTATAVRSFRPR
LPVPNALRPGPIRTQPAVNTDIDGGQENTAGATAADVGAGVFFGTHFELAFGQVDVHR
HIRHEQAMRDGHQDLSV FVGADGAIMLEELKNRYQRPPENEPHDDDVTEMIKTTEETEKE
NVEMDQDIADVVDNVDEQVVVTPAH DADSVA VVAEQVVASEPTPEVPKVEHVEMSVDLAG
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LEAENERLKKEVDALAAELSAALMGEGGGDHD

>aaRXN01811 TRANSLATE of: rxn01811.seq check: 3834 from: 1 to: 681
VFEFDDTLAKDIQVDRTSMQVFEASETVKEAIKASIEQGHTRYPVILESKDNVLGYVTLP
DLIKQSYKDDQLTVEQLIEEPIVTTETIPIKLLTIMRKKKGKHIAILKDEYGGTSGLVTI
EDILEEIVGEIRD ETDLDEALIAEQSDGSYIISGKLTLD DFQRYFHVEIPEFEETNFTTL
AGFASSRYKEIKAGTII EIASFRFTVLEYQHAHIDYFKVESTERKTE

>aaRXN01813 TRANSLATE of: rxn01813.seq check: 1579 from: 1 to: 666
MVAIVVVAIVVVGFIQGGSKAAKLGDRDYEDTSLAMEVGSDSITLTSANTSADAKSV
QLFEDFSCSHCSELSLATDADMKTQIEDGNLVVEIKPLNFLDRENIDGHSTHALAAALAV
ADSNDATLYWNFRAFLMEDQSEIYNQWSDDDFADGVEALGADSSVVD AIRNGDNIQRAYD
LATANGEELTEETGSLSSPRVLQDGKDVEGNISDWITTVLAS

>aaRXN01815 TRANSLATE of: rxn01815.seq check: 2232 from: 1 to: 792
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EVLNAGETFGGIFGSNATEADIRTDAPQYRIYAHGELIDSPASAVDYWRDDLVSFIIIGCS
FTFEHPMVQAGVPVRHLEAGRNVP MYETSLACRPAGSLSGNLVSLRMIPASQVADAVRI
TSRYPAVHGAPVHIGDPSLIGIDINNPDFGDAPLSEPSDVVPFWACGVTPQAMVMSSKP
PLAITHAPGHMLITDAPDLGFQVP

>aaRXN01825 TRANSLATE of: rxn01825.seq check: 7373 from: 1 to: 270
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IPFMADLGAWNYGIGFGLMIIGLLMTMGWR

>aaRXN01831 TRANSLATE of: rxn01831.seq check: 8077 from: 1 to: 462
MDSLVLGLLRIALLVVLWFFVLMALRAMRADLKVTGQASTSSSSVAAPQGLARAFNRSSP
PRLLTVVEGPLAGSSIEVSEDMTMR SPECTFVVGGDYASGMHARVFKRGSEWFVEDLDS

RNGTFVGGTRIDQPEQIAVGTDIRIGRTAVRLVP

>aaRXN01834 TRANSLATE of: rxn01834.seq check: 6044 from: 1 to: 702
MLGGGGAILAIPLLIYGFSFSATQATAASLIIGLGALIGLISQYAAGHVRLKEGLSFGFL
LGLVGSFVGSHLASNIPDSLLLSGFAILTLVVALTMISKLRSTREYITRRPSILAIALSA
TGVGFLTGFVGFGGFAIVPALIFALGFSMRQASATSLVVI AVNSAIAMGFRYSDLASID
WSVISPIIITTVLGAFSGVKLAKKVKASSLQLGFAGFLIFISIIYMGFQNFDF

>aaRXN01846 TRANSLATE of: rxn01846.seq check: 4543 from: 1 to: 282
MSIPGNVSYVAQGGTGWDGADQYTTGESWDLQSFLNSTDYLMIIIGGSLLALVGGA AVIW
GFVNVMRKLFGGQSGQIQWFTTILLIIVGGALP

>aaRXN01847 TRANSLATE of: rxn01847.seq check: 7155 from: 1 to: 735
MLIVLPPSEKTHGGSGKPLDFHLSFSPSLTKARQTILADLQALEVDEALKVLGISEKLR
PEAESNRALETSPTMPAIFRYSGLYDALDAATLPEKALERLAIGSALFGVIHATDPIPH
YRLSGGTLKPTKSGELPTMKARWGTISEALIDVNQLVIDLRSGTYQQLGRVKDAVTVRV
ESVMEDGSRKVVSFHNKHYKGELARVLALSEKEAHTAEDVMSIAQAAGLVVEENPNHKET
LTLV

>aaRXN01874 TRANSLATE of: rxn01874.seq check: 6539 from: 1 to: 348
VIAYVASACCLPFGAFAGALLSKELSGHLQERVLLTHTVINFLGVGFAALGSLSVLFAA
IWRTKIRHNFTPWSVGIMAVSLPIIVTGILLNNGYVAATGLAAYVAWLLAMVGWG

>aaRXN01875 TRANSLATE of: rxn01875.seq check: 5040 from: 1 to: 846
MRIAVTGATGSLGGHVVDSSLNKGVAASDIVAIRNEEKAADLKARGIALGVATFEDEAA
LTAALEGVDRLVFISGSEVGQRVAQHTNVINAAKAAGVTFIAYTSLNLGTSKLALAPEH
IATEKLLAESGIDHALLRNGWYWENYESSIGAAKATGKVFGAAEGARVSAAARKDYAEAA
AVVITSDNQAGKVYELAGAPALTYPEIAAGIGEVIGSEAEYVNLVVEEYQNALEQAGVPA
EFAALLAGMDPIIAEGALYSDSTDLQDLIGRPSTSIVEALSS

>aaRXN01877 TRANSLATE of: rxn01877.seq check: 5596 from: 1 to: 1071
VPLRLATGGVLTALLIGGVTAATKKDIIVDVNGEQMSLVTMSGTVEGVLAQAGVELGDQ
DIVSPSLDSSISDEDTVTVRTAKQVALVVEGQIQNVTTTAVSVEDLLQEVGGITGADA VD
ADLSETIPESGLKVSVTKPKIISINDGGKVTVVSLAAQNVQEALELRDIELGAQDRINVP
LDQQLKNNAAIQIDRVDNTEITETVSFDAEPTYVDDPEAPAGDETVVEEGAPGTKEVTRT
VTTVNGQEEESTVINEVEITA AKPATISRGTKTVAANSVWDQLAQCESGGNWAINTGN GF
SGGLQFHPQTWLAYGGGAFSGDASGASREQQISIAEKVQAAQGWGAWPACTASLGIR

>aaRXN01879 TRANSLATE of: rxn01879.seq check: 6847 from: 1 to: 933
VKITAKAWAKTNLHLGVGPAHDDGFHELMTVFQTIDLFDFTVTLTTLDEELVEEGSVVKQL
SVTGARGVPEDASNLA WRAVDALVKRRAEKTPLSAVSLHISKGIPVAGGMAGGSADAAAT
LRAVD AWIGPFGEDTLLEVAELGSDVPFCLGGTMRGTGRGEQLVDMLTRGKLHWVVA
MAHGLSTPEVFKKHDELNPESHMDISDLSAALLTGNTAEVGQWLHNDL TSAALSRLPELR
SVLQEGIRSGAHAGIVSGSGPTTVFLCESEHKAQDVKEALIDAGQVYAAATATGPAASTA
DQRGAHILTVS

>aaRXN01896 TRANSLATE of: rxn01896.seq check: 5243 from: 1 to: 636
MTHAILFDLDGTLVDHASAARAALHAWSP TVGVDTDVERWIELDKWGFARFERGETTHLG
QRRDRIRAYLNRELD DATCDDIYSGYLKAYEQNWTAYPDAKGVLDRAVATGAPVGILTNG
AAPMQQDKLDR TGLGLPELVMLAASTLDS AKPRPEMYARAL THLGARTATIIGDDWTNDV
AAPRELGNALYLD RSGTDPRADIHSLDEL FH

>aaRXN01899 TRANSLATE of: rxn01899.seq check: 7424 from: 1 to: 786
MSRTLWAVSDLHVTF AQNQNTVDALMPQDPGDWLIVAGDVAEKIPDVVRTLSALVKRFDT
VIWVPGNHELNFNRKTRVNGKARYRALVGQLRAIGVITPEDPYPIFGGV TICPLFTLYDY
SFRPLGLTAKQALAQAKIKLDDELAIAPYVDIPAWCAERVITYTEDRLKATKGPKVLVNH
PLVIEPTHRLFQKDIALWCGTTATRDWAVRFNALMAIHGHLHIPAETRV DGVSHVEVSLG
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>aaRXN01902 TRANSLATE of: rxn01902.seq check: 3503 from: 1 to: 1059
VQKKSRTGQTTWNGGPPIENPGTSFILSAGDQANHSSWDEHSAYISPETLRNYRLAVNNG

NHDQYNYDAYNAMYPRPNQVDENYFFEYNNALFLSLDSNDYLDIDDDIAFLRDTVAAHGD
DKDWIVLTYHHSTFSQAYHMDDARIKYQRERLTPVISELNVDLVLGGHDHIYTRSHLMNG
FTPVDAGREAVVGETLNPKEGEVYVYLATNSSSSGSKFYDFYDFQLGQRYDTGLDFQETVDQ
KKIRTYTAVWNQDQVQDYTNVELTPEGLTVTTKDAVSGELVDQFTLSKQDRDEESEVPVE
DDKGDGNATGSSNLGLAAILAPVLAIFGFVGGFLVGGGSLAEFFANLGVKMPF

>aaRXN01908 TRANSLATE of: rxn01908.seq check: 3792 from: 1 to: 846
MHSDRFEHPDNGYGYTIRQDTDAENPMTHHDTKDAALWVHNRPRRGDTVADKPEGNEILD
IFAKFICGQHDNDNDNPFVWSDGSDASLIRTKAYVAEHHPELIFDISAKTITGYSQGDW
LDVVCVTTAATCDELIPADSLIDIYRQWAFGDVWTVIPDSQPGLAGIYADDPADALAYYQ
ENFEDEPIWDLRSRHDADKDAALAAASAAENHALARGTTPVVIRTQDIITNARYLMSDS
ADDNPEYDRALVELSAYLLSIDLDDRVAEMTILGRPVPKEG

>aaRXN01909 TRANSLATE of: rxn01909.seq check: 5615 from: 1 to: 879
MANFRSKDKDGNVINPNASTKGVDLVNVYDSAKHVTEKNTVHFVDVQVAQIPIDADGT
RANANLAPQTMPLHLDTKDGQRNTGVAYSDAQIQAMQTVAAQGRNHMTPLLSKDGETVG
YSMLVKADVMFPKTKDGKSLPAVMNTKSLQPSGVPISDAMNIQQQFMAMNRQAEEAQ
KAAQAQATQAQAPQVAPQPMQNNQQFQAPVPOGQQPAYAGAPVYADAVAHATAQQQAAAA
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>aaRXN01910 TRANSLATE of: rxn01910.seq check: 445 from: 1 to: 846
MAFPLLAAGTVAPVAAGWAKDKFLSNSQNNQQAQNNQMSFGQVNNQAQNSGSENGSFGMG
QYGNLGLAGLAGAATGAGLAYSDFDGQSLSSKARNMVGKGLAGAGAGVFTKLANDAIQAE
GGSMKASAYSIAAGGLGSYLKDGPGVKSAMASGAAGFGADKVHDKLAESGHEGLADSL
SGAIQGGGLGYSTLGGVTGAGIGGATGGLAGLAQNYFGGGDDYSNAGASASGFSANQVNS
EISTEIPQFANLGPQRSELEQLALPQESRSVDKSYDQGYEA

>aaRXN01911 TRANSLATE of: rxn01911.seq check: 9256 from: 1 to: 939
VFIIGAGLPLLYVPIFVTIVIMVVYALLRYEQRMSTVYEEADPVEMDSVIWEGIKCDIA
SDIAARAEAKKAKKPVASDAVAVGNVYIASLRQHMLVETQRRYHHKLGRELHNDPAQLEDY
GSGLRDCECRACVVAQKLGVTVHAGVVQASARKKDRVIIIGRADGIDVAGWWNHRQEARR
KTSAAKQLERDAQRKRTQAERDKEIERKRKAQEFVAEQSGKAAAAQRRAEKKAQKQARVD
ELVAQKQAAQEQKTHCKRDKQRAKKAQGRKVGAVDNSAVDDVLAYAEKTRSIAGCRDDDS
VVHVDMAAGVRDV

>aaRXN01930 TRANSLATE of: rxn01930.seq check: 8516 from: 1 to: 951
VISTNEIENIHSTRDIEIALDESSTSEPKRFSEISHLYLALAEKISFPESPSELRELY
DHLMHGELGKENELDGEIFRQGPVEIRDSRQKVIHSGFSPESQIIEGINAIKLAHSEEE
SNLVGIMSMHFMFESIHPFYDGNRTGRYLLGIQLSKILSPATALTMSSAINQFRNKYYK
AFHAVEHRLNRDGTGTPFVISMLELLIAAQEGLIENIKQRIDFLASLEDAIKTLRGTSNFK
NHQINLLYILGQIQFLGKDETLSSLESAAKFLKVSKATATRYFRTLREMELVHEVSKRPLR
FALTDKGREIVGLEVKI

>aaRXN01944 TRANSLATE of: rxn01944.seq check: 9781 from: 1 to: 972
VRTATLHVTSSAGEAATTINLTEDDGSFNWALPAADLTGKSWFEYTVTATDGFNSVTTEP
VRVTVDGANTDPLRLNLEENQWVSGTTDVIGASDVFGDKLELLIDDAVNTSSLSAAPT
FAMEVTQTDVFRNGILAGGEELRIFDQGTANTTETISTPVPLYHINEDGTLTVSVYAGT
KAAPEIDLNENNDQFQIRNLRILPDGRTLTPAGISDSNAWLNMGDSAGKLDFFDATFAL
PEDAFTGVAHAWDTTQSTDGEHHITISREDGGEISRTIRVDNTAPELTVSGVEEGQELRG
TVEIDAQATDAGAGVKSVELLLDG

>aaRXN01945 TRANSLATE of: rxn01945.seq check: 3307 from: 1 to: 1992
VQLPLTTGSIALDKGEHTLVIRAEDVGNRTEKTITFSTPDENPISGDYAPSNAGATVGVG
DVKLSARASDPGDTVKMTFLEADSPKLDSGRVMSSTVEDAGSVSRAEAKMLERGDVE
KLSSLDGLGMEVTSDAALPYQLFEVDAADALAADTEVRLNWAGSADGRAQVIMYVFDGEA
WVEVDRHLTGDELEEFTLQGVVNAEKFAIGGTVTVLIQHSEGFAGADHSTRNSDVTAHP
DDVARSEYDFTLAWESDTQYYNEEFHEHQTNIDYVLAERENKNIQFMFHTGDVVDWDQ
PAQWATANPEYQRLDDAGLPYSVLAGNHDVGHSTNDYTEFSRHFGQRYVDNPNWYGESYQ
DNRGHYDLFSAGGIDFINVAMGWGPDDEEIAWMNEVLAKHPERVAIILNHEFMLTTGGLG
PIPQRILDEVAATNPNVSMIMSGHYHDAFQRTDSFDDGDGVDDRTVTSMLFDYQGLPEG
GQGYLRLLHFDNQKQMMVRYTSPSLKDYNSDEPSLLGPAEDPNMYQEFVSYEQGLGIKP

EGRTLIGDSFSADFLTSNEIGIVDEVPSGTIAFTNWKDVTEGRHSWYVRSEDPFGGVEIS
PVQSFIAGEEAGGNAPGTGSSNGGSSHGLWGALAEFFAGAAALAGAAIAFVPGIWDYVTN
AFKR

>aaRXN01960 TRANSLATE of: rxn01960.seq check: 2689 from: 1 to: 318
MPQHFSQENYRKAPVIMSAPLTIHDLLSTNSKLNKWLCTVLNSPNLTEPCITVSVNHT
EGMSLVSEFEGGHGLTEIANTQLVPVLELPKFNPFALAIHLEAANN

>aaRXN01985 TRANSLATE of: rxn01985.seq check: 6664 from: 1 to: 1050
MRTSRVLGILAAATLTVSLAACSDSSETSSNSSAASQSSDVSNEAFPVTIEHAFGETT
IESKPERIATVGWSNHEVPLALGVTPVGFEKVTWGDDDNNGILPWVEETLSKLGSDPEVL
FDATDSIPFEEIANTAPDVILASYSGITQEDYDQLSQIAPVVAYPEIAWGTSLDEMIEMN
SKAIGLEQEGKDLIADLDAEVASAIIDANPELKDAKPVFAFFDESDFSQIGVYTSIDPRMS
FLLDAGVQEASVLKEHSSPDSFYEQVSAENPETFDDVDVIITYGTEDDAANAELLSKMQA
DPLLSRIPAIAGKVVFLGANPLAASANESPLSIPWGINDYFAKLAEPLK

>aaRXN01987 TRANSLATE of: rxn01987.seq check: 9043 from: 1 to: 213
MTFPAQSRRLARSTTDKWIGGVAGGLAETYGWNPAYVRLAFVASVLFPLPGSQILFYALA
WLIIPSRENRF

>aaRXN01988 TRANSLATE of: rxn01988.seq check: 4185 from: 1 to: 426
MNMKTHPASAKQTTELRLLTATVYFKALNEVHNVQMIDPLTPVVPITGTSTVAELYADA
REHLDNATQVMIPVISPSNLTLSVVALGNEEVDALGHSEGQAVHSLEIHTPKRSWPLS
ELYIDDNEGLAQVSRFCARLVG

>aaRXN01991 TRANSLATE of: rxn01991.seq check: 5467 from: 1 to: 873
MTNLLPHFPSTDVAWEPTVVYSADKTTATATFKNIPSDISFSWTGIEALEPFPSPGKTFE
HKVQGSVGEPAGAFTRDNYFTEGELYKHRHADDLLSGDGLFGPNITDGDGNLPSVDDGKD
GDDGSDGSDGRDGVVAIDVVDNADGTVTVTLSDGTTFTLDAGQDGDGLDGLDGTGLTLE
SATPDEDGNITYVLSDGTEFTVRNGVDGSDGKDGKDGVNGTDGVDGSDGKGLVEVSRVTN
DNGSVTITYEDGSQITTKPTPTNWLKLLDLLPLFNLFLGSGSVISSK

>aaRXN01996 TRANSLATE of: rxn01996.seq check: 8265 from: 1 to: 537
MSKLTGTWTLDPATHEIKFVARHAMVTKVRGEFTEYTDISIVDAENPENSSAKVVIKTAS
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EVGGVAEDPFGNTRLGFEASTEINRKDFGVDFQAPLSTGGVLVSEKIKIEIDGSAIKAA

>aaRXN02007 TRANSLATE of: rxn02007.seq check: 3631 from: 1 to: 633
MSSDAEKASVELSEKFHPERTHILGAVVFGILISLLVIGAAPQYLFWLLALPVIFGYWVLK
SSTIVDEQGITANYAFKGKKVVAWEDLAGIGFKGARTFARTTSDAEVTLPGVTFNSLPRL
EAASHGRIPDAITASKEAADGKVVVVQEDGYSVMSKEEYLERQKALGKPVQLNFDDDDTD
GNTTQTESVESQETGQAASETSHRDNPASQH

>aaRXN02014 TRANSLATE of: rxn02014.seq check: 217 from: 1 to: 507
MENIAEQAGVG VATLYRNFPDRFTLDMACAQYLFNVVISLQLQAISTFPTDPEGVWTSFN
QLLFDRGLGSLVPALAPESLDDLPDEVSALRRTTEKNTTTLINLAKQHGLVHHDIAPGTY
IVGLITISRPPITALATISENSHKALLGLYLSGLKHGMANIGEHDGKS

>aaRXN02019 TRANSLATE of: rxn02019.seq check: 8826 from: 1 to: 501
EIPAGTKVEASDLGLQAIPTSLPSTSYDSIDDVVLVAASTLSSGEIATKPRFVGTELI
NSIATNVTDSLSVEEINMVPLSLAEPSPVPLQHGDTISVVSQDPDTGLPENIAAGGTVI
LAGGTDPTSTILIALPQSI AEKVAAQSLNTP LAVVLTGDRADNYTTEE

>aaRXN02023 TRANSLATE of: rxn02023.seq check: 8728 from: 1 to: 768
MAPKQTPSPEKNRNLVGPVLQRRQTEGTFDQRLLEMRADHNWKHADPWRVLRIQSEFVAG
FDALHEMPKAVTVFGSARIKEDHPYYKAGVELGEKLVAADYAVVTGGGPGLMEAPNKGAS
EANGLSVGLGIELPHEQHLPYVDLGLNFRYFFARKTMFLKYSQAFVCLPGGFGTLDLDEL
EVLCMVQTGKVPNFPVILIGTEFWAGLVDIRHRLVEEGMIDEKDVRMLVTDDLDQAVK
FIVDAHAGLDVARLHN

>aaRXN02032 TRANSLATE of: rxn02032.seq check: 9048 from: 1 to: 570

MPFLQISLLSIGVAADAFACSVVRGTAIQVNLFKRALVLGIFGVFQAAMPLIGWFIGRF
FAGITFIAEIDHWIAFALLGIVGTKMIWDAFQPEDDETIVDDGRVQFRPAIILGLATSID
ALAVGMGLAFVEVSILKVALSMGSITFALSLAGAWIGHHGGGKFGKWATILGGIILIGIG
ANIVYEHLA

>aaRXN02039 TRANSLATE of: rxn02039.seq check: 6804 from: 1 to: 840
KASISNLSFWTSTSTTAPLWLVLVAVQAVMHDGELYHVEVPTIALVIGFQAQLLIG
VMSYLLPSTMGGGASAVRTGTHILNTAGLFRWTLINGGLAIWLLTDNSWLRVSVVSLLSIG
ALAVFVILLPKAVRAQRGVITKKREPITPPEEPRLNQITAGISVLALILAAFGGLNPGVA
PVASSNEDVYAVTITAGDMVFI PDVIEVPAGKSLEVTMLNEDDMVHDLKFANGVQTGRVA
PGDEITVTVDISEMDGWCTIAGHRAQGM DLEV KVAAPN

>aaRXN02044 TRANSLATE of: rxn02044.seq check: 4936 from: 1 to: 1383
MVTPIMGNSNSILGIYRQKIQRHLVSTLFRAYFPIVTELIILLIVIVTALAFDFTNGFH
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HQLLLVVFAGLIGAIWVNLTLWLLGIPSSSSSHALFGGLIGAAIASLGFGGVVWEGVLSKM
IIPALAAPVAVGLVAAIGTFVYSITKAVGDNEKNRYFRWGQIGSASLVSLAHGTNDQK
TMGVIFLSLVATGHLGTDADIPFVWKATCALAIAIGTYLGGWRVIRTLGKGLVEIDSPQG
MAAETSSAAIILTSSHFGMALSTTHVATGSGIMGTGIGRKGAKVRWSVAGRMAMAWVITLP
ASAIVGVCWWVAHGIGLISSDLLGVLVAFAILVILSGYIYARSRRVPVDPSNVNADWNE
ESNSVEPATPSAPAASEITEAPAAPAAQAVQDLNNEVTK

>aaRXN02045 TRANSLATE of: rxn02045.seq check: 8713 from: 1 to: 261
MNFATIFGSI FEVTLVGILLGAGLPALFALGIRFAHSPSSNGTNALGKIASTICFAIIAV
AIIAGILWVTKATIYQYSGFDIFGTEG

>aaRXN02049 TRANSLATE of: rxn02049.seq check: 6577 from: 1 to: 609
VRYLTLATIIAGLSGFVVI IIAAWALGDSSQLSEEFYAYWGLFFAGTGVLTLTQETTRA
VTAGSRGSGRGRAGSVVGFRLFSFVVAIVLVVLGASAPLWIGQLLSNLQGVGVGLL
AVGLASAIQATISGIFVRLPIVERVCLADFFGHRRAHGFNCCRLVAGLSIAGVLDHHR
GINILAGHRAVLRFGAFRFGIGC

>aaRXN02050 TRANSLATE of: rxn02050.seq check: 1487 from: 1 to: 795
LDTGVRMVLTVAAWLLGYQLLAFLIITVVGSI SWLVIVLCFGSVRSVLGSAVDVSRGVFI
RQALLAMAASGATAVLITGFPTLLKFTNPASAVAGGVMAAVSYAVILTRAPLLVPLQQFQ
SAIIVRFVKGTSGLKTLAGPLAIVWAVGLVGLAGLAWLVGPWILDVVLQKELFAVPGWLL
AMLTGATTTASLMVSGCAAIAFERHGIYLTGWVVATVVAVGFLLPFDLGVAAGLALIV
GPLCGLLVHMGAFVGGDRNRVLTAG

>aaRXN02059 TRANSLATE of: rxn02059.seq check: 3288 from: 1 to: 495
MTQPRPDAAVSLSLEKKRPEGWPVGSFETYPEAQA AVDLLSDNAFPVTELTIVGVDLIEVE
RVTGRLTWGRVIAGGMASGAWLGLFFGIVMALMSGFWFSSIAAGIGMGLVFGIVGAAPY
AASKGKRDFTSSTQIVAGRYDVICSPERAREARDMIALKTRDLRQ

>aaRXN02066 TRANSLATE of: rxn02066.seq check: 2735 from: 1 to: 492
MFNSDTTANLQAKSRDRAGSKAKRSRPSFDSVARDVLDVRTKTAQVKNKAKEFSSVDHLS
ADAAAMFVDNELSRGAMHRARLHIVHCAECREEINRQRETVDYLRSECKNEEVSA PMDLK
ARLASLATECMPGPGAENLAMQRPESFVAKVESVVRVAVRKNQGR

>aaRXN02067 TRANSLATE of: rxn02067.seq check: 4916 from: 1 to: 456
VGWGEIFLLVVVGLVVGPERLPRLIQDARAALLAARTAIIDNAKQSLDSDFGSEFDEIRK
PLTQVAQYSRMSPKTAITKALFDNDSSFLDDFPKKIMAEGTEGEAQRNKQAADNNANVV
ERPADGSTARPTQNDPKDGPYSGGVSWTDII

>aaRXN02075 TRANSLATE of: rxn02075.seq check: 2111 from: 1 to: 789
MYKVFEALDDLQAVQRAYGVPMTGNCVVRQEV LALLDDLRLDALPVELDDAQDVLDRD
GVIREAEKEAIALVDDAENEARNLLARATEESDAMVEDATKHAHSVAKANDTADRVSD
ARREANSVTERAQAESERLVNSGNDAYRRAVAEGQAEQDRLVSEAEVVRSTEEAHRIVD
AAHADSNKLRNECDDYVDTKLAEFETSLSTTLRSVTADRSALRRGAGATGRELRDEQPA
RGEYERDYERDYERGERDDRDY

>aaRXN02076 TRANSLATE of: rxn02076.seq check: 9502 from: 1 to: 534
MKSPFIFDVAALLRGSALPEHLTQSGPSPTRIGPEMIAIPEGGKVIVEAQIIPLGGLAV
EADIEAQLLGQCSRCLRELTPKTLHVSEVFAADPDFVTGEDAADDEDELPMVNQDQIDL
LQSVIDEAGLTLPFNPVCEELGYGACQDDETPAPDGVSEEVEDEEKVDPRWAGLEKFL

>aaRXN02094 TRANSLATE of: rxn02094.seq check: 8559 from: 1 to: 717
MAEHNAIITDAVHSDPAVLEDNAGFSGKYLIRALDKAAHMQTGAIEGYISWLRKHNPEKT
PAQLQVLVDKHEMRLATGSGAGVGMAAAAPGIGFVTGALAVGAESLVFLDAAAFYTMASA
HLRGIDIRHPPERRRGLILVLLGTAGKAIVDAGVGDLSKKNHAPGIAISRFNIGGLMEVN
GRLMRYAVKEVSKRFRSALIGKILPFGIGAVLGTMANRKIAKRTVGNAYDSLGLPLTHF

>aaRXN02104 TRANSLATE of: rxn02104.seq check: 737 from: 1 to: 1122
MSNSPTDVSAPSAPRIMIAPDYSKGTATASEAAQYLGEVLEILPNASITLAPMADGGEGT
SSVFGGQVITLPTTNAAGRLTEASYTLTSETNTAYIDIAASGLPAVADDLVPTTGDTYG
TGVLIADAVTRGATRIALGLGGSATTDAGSGILIALGAVPRNKEGYALRTGGADLINLDY
IDTAELNIPAAAWEVILLTDVDAPATGPQGAATVFGPQKGATEKDISLLDAALHHACAQL
EVDGTPKPMGAAGGIAIGLTLWLSTLMHGNDQIHLPGAPLIARSNGIEDALPETDLLIT
GEGRLDSQSTGKVVGTLLHGLAKAHDVDLAVAAGIVEGGIPDDFLAVEMIKSSDVAAQLR
DAGRRIAQEYVAQN

>aaRXN02107 TRANSLATE of: rxn02107.seq check: 3646 from: 1 to: 342
MDLHKVAAAAHAATLPLSTKEFPFGPEHEVYKVRGKVFLLLTILNDEPIITLKSDPEIGAS
LRSGFPTTIQAGYHMKNKVHWSISDGERITKDFIEGLVEESYELVISTLPKYKRP

>aaRXN02108 TRANSLATE of: rxn02108.seq check: 5369 from: 1 to: 609
MGDMKITERHIHACVEISQGNDRIIDPGTFGAPDLGATILVTHNHADHVDPELLKPGMT
IYAPRSVAHSIPVECHIVEHGRNFTVGSLSVEVLGSEHAMLTHSMPIAENVGYLINGRVL
HPGDTFQPIKDVELALVPVNGPWVKMLDVEGYLKKFPKRFIHDGIVNDRGLAINKKF
LTHLGETYGESEYSPLEEGESLEI

>aaRXN02114 TRANSLATE of: rxn02114.seq check: 7318 from: 1 to: 486
SIGYAWTTAFHALTPGLGGIAIGIWLLGGVLGGLVIRKPGAAIFVEVVAACVSAALASQF
GISTIYSGLAQGIGAEIIFALFLYRRYSLPTTMLAGMGAGGGAIFLEFFYGNLAKTMSF
NIIYSTTVLISGAILAGLLSWYLVRLALARTGALDRFAAGREV

>aaRXN02121 TRANSLATE of: rxn02121.seq check: 4238 from: 1 to: 705
MITSPFERELKLLNEGELGIVQQLVNESSNIGFIVDLELDGDYGWAVYKPELGEQPLWDFP
PGLYKRERAAAFVISEFLGWNIVPPTVIMHDAPAGVGSVQWFIENNGEHYFPLFDTRADLH
PQFVRMAVFDLLCNNTDRKAGHVLLDGDHIWGDHGLCFSVEPKLRTVIWDFAGCTIPDD
LVTDVEQILLEDVPEELHQLLHPAEIDALQRRASRISRLPFLPQAKSHRQFPWPLV

>aaRXN02138 TRANSLATE of: rxn02138.seq check: 8752 from: 1 to: 342
MTAPSTNTGVILTESAASKAKALIDQEGRDDLSRIAVQPGGCSGLRYQLYFDDRTLDGD
KEDIVGGVRLVVDKMSTPYLLGAQIDFADTIEQQGFTIDNPNAGSSCACGDSFN

>aaRXN02151 TRANSLATE of: rxn02151.seq check: 8209 from: 1 to: 1188
MDWPDIAGKISILGVVLLHVSLAIPGGQDTMMSHLNALLDPLRMPLFFMVSGFFAVKVLN
QSFGELFRGLWFYLVYPYLLWTPVNLYLHRLGTVFTGRAPGTWEWYSGSMLSATNMYWF
LYFLVIFNLFLWATRKLPAWAIVALVASLWLLMPAYSEIEILKRSIYLPFTFLIGAYFRP
LISRFAEAATRPKAIVFAAVLYVSGLALGVISNGLRDSNHGASVLWLMNLRDTFAHALG
GNLTGFDMDHLPGMIIRIVSLPAGIVLCVWLGRIPVGEFLKLIGRHTLPIYIGHATGLS
LIFGGLRWNFMEIDNFSDSLWHHTNTWMVIAFACAMLGGLTYLISRVPLGWTLVPPK
LPEDKTPAKAQADSHVKAQSAKPMNASTSSKTYGI

>aaRXN02169 TRANSLATE of: rxn02169.seq check: 3541 from: 1 to: 846
LDMQINRRGFLKATTGLATIGAASMFMPKANALGAIKGTVIDYAAGVPSAASIKNAGHLG
AVRYVSQRRPGTESWMIGKPVTLAETRAFEQNLKTASVYQYGAETADWKNGAAGAATH
APQAIALHVAAGGPKNRPIYVAIDNPSWSEYTNQIRPYLQAFNVALSAGYQLGVYGN
NVINWAIADGLGEFFWMHNWGSEGKIHPRTTIHQIRIDKDTLDGVDGMNNVYADDWGQW
TPGNAVDDAIPTIPGNSNTGTGTGIDADTINQVIKILGTLSS

>aaRXN02180 TRANSLATE of: rxn02180.seq check: 4458 from: 1 to: 1458
 MTSKGSTSTRGALDRYFKISERGSSIGTEIRAGVVTFAMAYIIILNPLILGTTDPVEGN
 TLGIAQVAAATALAAGVMTIAFGLIARYPFGIAAGLGINTMVAVTLVSGEGLTWPEAMGL
 VVLDGVVIVILAVSGFRVAVFRAIPASMKAAISVGIGLFIAMIGLVDAGFVRRIPDAAGT
 TVPVTLGIDGSIASWPTFVGVVGVLLCGILVVRVRVGGFLFIGILGTILAIIEAIFDSG
 ASFENGANAEGWSLAVPGLPDSFGGIPDLSIVGAVDLIGAFSRIGVVAATLLIFTLVLA
 NFFDAMGMTALGKQGNLVDDEGNLPDIKKALVVEGAGAIVGGAFSASSNTVFADSSAGV
 ADGARTGLANVVTSGLFLAAMFLTPLYEIVPIEAAAPVLVVVGAMMMGQVTEIDFSKFYI
 AFPAFLTIVIMPFTYSIANGIGVGFIMYAIMAAAAGKAKQVHWMWLVAGLFVVFFAIDP
 IMEAVG

>aaRXN02185 TRANSLATE of: rxn02185.seq check: 8940 from: 1 to: 579
 MGRHSTKTSSAFTKLAASTIAFGAAATIMAPSASAAPDSDWDRLAQCESGGNWAINTGNG
 YHGGQLQFSASTWAAYGGQEFATYAYQATREQQIAVAERTLAGQGWGAWPACSASLGLNSA
 PTQRDLSATTSTPEPAAAAPAVAEYNAPAAANIAVGSTDLNTIKSTYGAVTGTLAQYGITV
 PAEVESYYNAFVG

>aaRXN02186 TRANSLATE of: rxn02186.seq check: 5727 from: 1 to: 198
 MYDMANVEKKHFVDPAPWPEHNPADGHVVTELISKVAGASSPWGDDKEFPVSAEETGYVHP
 YTRINR

>aaRXN02207 TRANSLATE of: rxn02207.seq check: 6831 from: 1 to: 798
 MRRRSRVSRLLPATALLASTALLSACTQGVTDSPDMGKATPAVSPAASNPDGQVIEFGN
 ITDMEVTDGILGVRTEDELAIGTVSDFEAGSQVELDVKQCGDLTATGGTFVLPCADGV
 YLIDAKDPDLDELRAIDKPVTVAAALTSDDQLLVGNGEDEELTIYREGEEPETFTVAGPNT
 QLIAPVPIDRHDAVVRTWNENTTIQDVDPNDREGATLRVGLGVGMAGGEDGLLVVSDE
 MGGQIAIYNADDVIRLQNDRPHRRGT

>aaRXN02223 TRANSLATE of: rxn02223.seq check: 9117 from: 1 to: 501
 MSTYQDDRFPDPYAPLGEKPSFTLTSTDLENGAKLAEALGGTDISPQLSWSDLPEGT
 KSLAITCLDPAPTGAGFWHWAVFNIPTTVTEIPTGAGDETLGGIEGVVSLKGDGSKRGF
 YGAQPPAGHAPHRYLFAVHALDVEKLDIAPDATPTGLGFNLYFHTLG

>aaRXN02226 TRANSLATE of: rxn02226.seq check: 1898 from: 1 to: 1056
 MTENQTPSSTSAPKPGPRPGPRPGPRGAQVAAKKAAVATPAPIAKTSNDPAKFRVEAD
 GSAYVTTSAGERLIGSWQAGTPEEGLAHYGARFDDATEVELMEQRLISHPDDATSIRTK
 AEELKATLPTIAAIGDLDGVEARLSKIINNSEEANERAKEQKAKNRERAVARKEELAVEA
 ETLAENSSDWKVAGDRIRAILDEWKSIIHGIDRKTDELWKRYSRARDSFNRRRGAFHFAEL
 DRTRASARKLKEELVERANALKESTEWNDTARAFRDLMEWKAAGRPREIDDKLWAAFK
 GAQDYFFDKRNAVAKERDQEFANATAKQQLIDEYDAQINPEQGLDGARSKL

>aaRXN02238 TRANSLATE of: rxn02238.seq check: 4471 from: 1 to: 285
 VTNVSNETNATKAVFDPVPGITAPPIDELLDKVTISKYALVIFAAKRARQINSFYHQADEG
 VFEFIGPLVTPQPGKPLSIALREINAGLLDHEEG

>aaRXN02254 TRANSLATE of: rxn02254.seq check: 1030 from: 1 to: 777
 IAVAEGLWENLLQHRFGGHGALAGHALGNLVIAALTDILGTSQHALDQIAQLAGAKGR
 IIPVCAEPLDLEAEVSGLDSDARVMRQVRGQVAVAAATPGQVRRVRIIPDNPEPNPAAIEA
 ILDADLVTLGPGSWFSSVIPHILVPGIVDALAQTKATKTVVLNLTSEPGETAGFSAERHI
 HVLRQHARNLQVDQVIVDAKTLSSQTERNHVERAARTLGAEVSFHDVQAEDGRGRFTSIH
 DPAKLCAALLASFAGARKR

>aaRXN02271 TRANSLATE of: rxn02271.seq check: 4621 from: 1 to: 558
 MSFLNSAKTKTVALTATFVGAATLATPAIASADIVDNALALPSGEISCSQAKEYWTTEA
 DYNKVAQANALAMFDSRGPQIQAAALARVDEAANRCGLKGGTVAAQAEATEAAPAAPAPA
 PQDNTGTSQTAPAPAAPAAPAAPATPVVNLAPAGSPTFTTIEVPGVGGVQLPDLYQIVQQFLA
 QFGIKI

>aaRXN02279 TRANSLATE of: rxn02279.seq check: 6646 from: 1 to: 1458
 LISLEKKQKDANFFLSELRRQGYRAVDFLESQTVLDLNNPDVQTYLAEELIRDDLRSWA
 VINQMALDNIDLVPYGEENDEPLAIARKIIEETASHPELRFENLEAQFSEFTILLAQSPE

NLDVARYQELRTQGNFVQELALDSIFGQHAVVQDTGNGEAILDETIGYMIGAGMRETTAR
 TASQFAQLYSFVGRQERSIEMARLAFEELQAAGLPHREEELRLGMQLAQVEPIEAREILE
 KLLLPKFEQNLTLDELETEALLPLGATVAIHDPQAAAAILRHARENAAGFGNFELAVQAM
 TMITDVLVTQNMHEQLLEELNHSPLPYAQMDDQHQAELKLLDSIAIVQADLGSTEALETL
 GTAMGLAETTAQKLYVQESLNRAYFTFARPEDCISGAADASALAMQNDDPSNAAQLEQC
 AQYLFQLGHETDGASLLESARFVEGIPTEQALYYANALSSIIYEDFGDSAKSQYWEQQAQE
 KQQLLE

>aaRXN02296 TRANSLATE of: rxn02296.seq check: 7700 from: 1 to: 489
 MRNQTIAAVALVLLTAATPAIAATPATAGNGLYSIDMGDEQKLTVCVLFDEPSTEAHVVA
 SCAATFPVTKLLDGAHEQAQKLEITQAQDGELSVTASKQPLITMTIAPTSITKPITVNR
 LVVVPGENEVRFYATDPDVLPLITPDSYEVLTDSAQKVKATL

>aaRXN02300 TRANSLATE of: rxn02300.seq check: 2962 from: 1 to: 333
 MKTYAVLIAVAGLALAGCSSSAPGIWRATEPADAYLEIADGTLSGTDGCNRLFEGWEKD
 GSTITFGAIGMTEMYCEGVNDWLSQMHTATVTDATMTIFNEAGSNIGELKR

>aaRXN02301 TRANSLATE of: rxn02301.seq check: 2104 from: 1 to: 717
 MDLALAQVDSTVSGLYDALDLIGVLLNGIIGGTIARQRGYDIIGFLFLALFSALGGGMIR
 DMLIQQGTVAIDNQIYLALAFSGALIAMAVNFKGRVWELFKVHGDAIVLGWAVTGSVK
 AMNAGVAPLPSIFMGVLTAVGGGMVRDVATGQTPTIFGGGTLYAVPATLSATSMVIFHSF
 DQVILGMIISPFLGIALAVTAYWCGWVIPVNTDFAPVNLTVSQLRAMLSKAERKDKDQK

>aaRXN02302 TRANSLATE of: rxn02302.seq check: 9010 from: 1 to: 879
 VATNRTSSAGVITSVLASALFGAIFFISGAIEAKAETLVAVRVLLTAACYLLALLHPAGR
 KVFKEFWDTLRSQPRQILYFIFLVVLTITLQLWLFWSWSPKSHALDASLGYLLLPFLVIVG
 RFFFADYITRLQWIAVGIALIAVTLKFVISAQLSWVTFAIAAGYALYFALRKYSGLNNAF
 AYGAEVLALSPLAFFMLATVEDPLSNAMLSMVLILAGLAGALAMALYLAASTLLSMPMFGL
 LSYGEPILLFVAALLLGETLNLSDAIVYSLLACALALLGFDGIRRSRKNLET

>aaRXN02303 TRANSLATE of: rxn02303.seq check: 6641 from: 1 to: 906
 MAENNTPQETEQDQEARFREEFEVGGKDRQLSEEEQLEQLGSYIDAHPVPDFTPPWAGG
 AGDPPADRYIAHLPPDRTHHTAMIMLGSLDHSMPGVAFIGGVSVDDVPEVGGAIHFHPSN
 PTGRWAVSFHSGGWRRGSGDALEFQWRPEVAAAAELSGTTILDLDYPLAPGHNLHDMNEV
 VGKAVGYARHHNPVSITGWGYSSGAALAINASLFDALVLTFFDLGSVEKLP AEIRGDAV
 VPAAAAWPTTFVQIAAQDEIAERPGELGDATVKEYVSRHRISTPKVAREKITDVAEFLKT
 VC

>aaRXN02307 TRANSLATE of: rxn02307.seq check: 9052 from: 1 to: 621
 MSGTAIMYDITVVPKKEIAQAWTGYVDLQGSYRLVDTVDGEVGVVLSKDRGRLLQI
 PFSYRSAEINPEQTLSTLEHGVLGKRWVTNALGDPVAVREFIRTILTGDGGAARSDGVKG
 YLDIKSGSDAESVDLQDVKLTEVTRQRAIGSVTINGERKQFSLRLPQLLKNFRETAAGHT
 ATTLRIVATHPEKDDVELLVAEFNWME

>aaRXN02314 TRANSLATE of: rxn02314.seq check: 2536 from: 1 to: 441
 MEWYQVRRRARQLLIVLFIAAMLGAASMVIGPFLNDRTEIENSGRALAQVTNVGSYRTTV
 DFQDENGIIYHSPATGLLFTGLGEGQVWVNYAKSDPDLVKVEGRKWTLSIIPALSVAHV
 ATATWSVLWLGVRFRGRSDDANETTV

>aaRXN02337 TRANSLATE of: rxn02337.seq check: 408 from: 1 to: 1323
 MSKLYAGARINARLRTHTQLTQSALADKLDLSTSYLNQLENDGRPLTATVLLQLMKVFDVE
 ASYFSRDRGTATATRLAETLAMNQPTMSMDDLDFADRFPQLAQHIIQPAEVDPTHSSA
 HDFVRDYFATHKNYIDSLDRLGEELATAIGQPGLRVTRLAQLLDAEYNITVRFRAPIGTG
 RRHFDPPQSRQILLRQDLSEAQQCFQLAEELTFLAHAELDLTLTDDQPDLPSEAAIRLAKV
 GLSQYFAAAVMPYTRFLEFAQDKHYDIELISEAFGVSFESACHRLSTLQMSGASGVPPF
 FVRSDRAGNISKRQSAATFHFSRTDGTCPWLWALHRAFERQGNITRQVARMPDGRTYLWLA
 RAVKGRTHGFGYPAAEFAIGLGCISEAPGLVYSQGLNLDPEAAEIGPGCRICPRENCV
 QRAFPSPGQESIRPAPVQLLN

>aaRXN02339 TRANSLATE of: rxn02339.seq check: 8878 from: 1 to: 492
 PTDNLFSYPAQRYDLLTLAFEVRIGDMVQINDMLAPPPVKLPEDPALGADPTLTSTAIAH

PDSPLVWAYRAENLIKASASNDEEKIQAYAFARTGYHRS�DRRLRANGWKWGPVFFSHEPN
QGVLRASLALAAKLIGEDNEYDRCRQMLSDADPESVAVLLDK

>aaRXN02340 TRANSLATE of: rxn02340.seq check: 7304 from: 1 to: 1065
MKKSIVVFEVEGGSDKHFDGHRKDTMPIVNSINDAGWQAEVYYRPEWTEGLFEYVSENF
DGYISRVNPGNIPGGERGYFDLLTRLSEAGLVGMSTPEEMMAYGAKDALVKLSQTDLVPS
DTEAYYDVETFHKVFPSTLSFGERVLKQNRGSTGSGIWRVQLVDKELAASIEPGTALPLD
TEIKCTEAVDNHTEVRKLGEFMDFCQYIIGDNGLVDMRFMPRIVEGEIRILLVGPHPV
FVVHKKPAEGGDNFSATLFSGAKYTYDKPEQWQELIDLADARPVIAEKLGGDNIPLIWT
ADFMLGDVVDGKDTYVLGEINCSCVGFTSELDMGIIQQLVASEAIKRIEEFAQLTV

>aaRXN02341 TRANSLATE of: rxn02341.seq check: 4129 from: 1 to: 486
MGNSLEKHIAEGDRIHVDLTSPLSAMLFPIFELIVITGICWMGIGFLDQLPGIDGTNPAD
SFPEGTRNLLVGWAVLAARFGLPLIRQRLRVILSDRKLLVRRAGLRTGFDSIPLSYI
QRVQRRRNTLVLGVGGHHRPYVINQVPKARKVEALLKDLTFW

>aaRXN02360 TRANSLATE of: rxn02360.seq check: 7403 from: 1 to: 2433
MRGDVQKITKVYDGGKHTLEIPVYQRNYDWTEKQCSRLFDDLSEVVKENHRQHFFGAVVG
KPQGSWTWVVIDGQORLTTISLFMLALVHSLRASEVEEGEFNAGYNIDLATLIEDDYLR
GNEGNLKFVKLPVKNDEAYQKLFGESEFIESSNLTANYRYFRNVLKATDLTAAQLWEA
IEKLRVMYLDLEEFDDPQORIFESLSTGLELSEADKVRNLVMDQELKTQEKLYEQRWNP
IEVCVKFDTDNFIRWYLTLTARTPRKQDVYEEFKKFIRNSKLPVEFILDMDYAYAKLYR
DLLGATTGFIAADRCLKRFVPMGDDVLPFLLPVLKDAKDGIITESDFLGVLKVLESYLF
RRFAVGVASNALSKIFSTAYSIDIKFWTPGQSYSSLLAYILKRRDGSGRFPSDSEFREN
ATKNFWNINENRRYLFDCLENADSNVDRIQTSLEGSLSIEHIMPRSLNDQWRAELGP
EYARIHETWINRIGNLTITGYNAYSNSSEYERKRTMENGFLVSPYRINNFICKQKHWS
QLIERTELLTQAALDYWPLPKETFQPPQAVLPTESLDSDLSFRGREIVAFEDYKETVT
SWADMLQSVLKVNLQSFQELIALTNEEICLATSNNSSSLREIDHGLFVDTGSSTSVKI
GFLRRVFTQLGLEQEALVFTLRPLANDVEPRDDELEVEVEKKYSDLTKEIPQLEEAENLE
GADTEVIPLSLKLKEQLTAFSPENQAALGGLPVPEFLKQNVIEQLSAEHILAVLTQHFN
IASMMGDDYLLLEELRSGRLRELLQRLLEELDS

>aaRXN02361 TRANSLATE of: rxn02361.seq check: 1002 from: 1 to: 651
MELLSHLLALDPASPRLTVYNSTGARLDFSAITLDNWASKVGNMLLEELDLEEGSLITI
DLPVSWQAAMIMLGALATSVEVSFDDPEADAIFTSLDRFSHYKGHSVLIVSEDPFGRGV
VEGGGELPNGAIDFGPTVRFYGDQFFQPTRTLPEIIQHSDVPVGARVLATGWSIDIESFNH
QVLEPLAVGGSAAVIVTGLADIERLNQIATNEKTTHRI

>aaRXN02367 TRANSLATE of: rxn02367.seq check: 8247 from: 1 to: 609
MSNAEINPVEYEINNHPGTALNPQCEDGANVEIITSREVPLGGPRAMTVHRTLPQRQRS
LIGAWCFVDHYGPDVSLTGGMDMASHPHTGLQTVTWLFEGEVTHHDSGGNHAVVLPGEV
NLMTAGAGICHTEVSATSTTILHGLQLWTVLPDKDREGPRRFDDHYAPEEITLEGGSARVF
LGSFLGQTSVPHTFTGSSCFRVH

>aaRXN02368 TRANSLATE of: rxn02368.seq check: 7600 from: 1 to: 675
MIVLAGATRVTYEVEPWLAIPFLIFALFASILIPFPISKTKGLRDIIDAWKIHTTQGDKKRA
IRQLIIPATALAIDIIGLPTLFNAPPLASAAALFGGVYGASLAWAAYRADQLPRIIRTKERL
AELSQNASLDDVRSDDLVDLEQPEPRESRELVRCLLAHGAMDGTRVMARQVARVLDTEVDEVH
QVARSLEQHGLVSRSTIMPGDGPVGFIEVSLKGISAIAKALESGR

>aaRXN02381 TRANSLATE of: rxn02381.seq check: 8210 from: 1 to: 1023
MSVTNFRRLFLAGIAVIAACVAATPTAQAGSSGSSGSSGSSAGSSGLWDLFFPESHESFIE
RLLDPLDDSHISHPDLTPDLYEEVFDPPQIGECPAVVAVVARGSEQNLQIRPARYSEES
PWTSNGFEEKNFRSFFGRMEKHYRESTGESLMKDVMGLNIEYPASPLSSEGSSAIE
LGTSISSGRDNVISAIDRFESATGCTPKYLLAGYSQGVLIVDGYEEELIARDQYLGTLHI
ANPAQQVDDPTLVGHEVTTGGLASSVEPVEDNPFKVSCLPGDIVCDRSFEQFSAGSSI
AAAQLSTGNIRPGRVHVQYFVTTQPWDEQIFDEVASWIEAA

>aaRXN02383 TRANSLATE of: rxn02383.seq check: 712 from: 1 to: 636
MPVRVIVDSSACLPHTVAEDLDITVINLHVMMNGEERSTGLSSLELAASYARQLERGGD
DGVLLALHISKELSSTWSAAVTAFAVDDDSVRVVDTSGLMAVGAAAMAAARMAKDASL

QECYDIAVDTLKRSETWIYLRHIDEIWKSGRISTATAMVSTALATRPIMRFNGGRMEIAA
KTRTQSKAFKLVELAQIRADGEPVFIAIGQN

>aaRXN02387 TRANSLATE of: rxn02387.seq check: 2544 from: 1 to: 762
VWWCLPTWIKAGQDAVDLALSAAVDPSPGTYLIVMHSGGGRSKSMVKKLEKVAVVHDAAK
LKDRDRPGWVKQEFKNHKVQVTPDVIHALLEGVGSDLRELASAVSQLVEDTQGNVTVEKV
RAYVVGVAEVSFGDIADSACAGQMSKAVASTRRALQLGTSPVALAAALSMKVGQIARLYS
TRGRINGFELAKELGMPPEVVEKTAKVARNWSGDAVSEAVILMADLDAAVKQSGDPEFA
IESAVRRVAELARR

>aaRXN02398 TRANSLATE of: rxn02398.seq check: 7197 from: 1 to: 1602
VVEVKKRNLVAPLTASLVFCNLAVAANAEEVEAESPVVINEVESNSDPVGDWVELANTD
NNNSIDISGWSLVDDKEDLENALVLPEGTEIESGGYFVIYTDADYVPTNNTFGGQEYFG
LGKDDTVTLRNAEGEVVATYSWKDLGEHAENTYGRIPDMTGDFANTGVPTPGAKNVAEAG
SGEEEGVANAQLPFHNVEITPIHLGGDFTGEDMSGVDFDANSTAWIANNDIGKIYSLAH
DIANNYKLTGEWETGYPEGGGEPAEGIVAATNGDIYLSERNNADKNVSRPSILRFAT
PTGKTGVQNAVQEWDLSEFVGDIQPNGGLEAIAQLEDNIFVVGVEETGDVIVVDLSADQP
VLVQRYESSFDGVMISLDYNAATKQLSVVCDEACDGLSEILEWDGEKLYKSDDKIYERPAN
LGNWANEGFGTYTSELKCENGNTVSVTSYLWADDAATNEGTSLSNAQVINGDCGDVNIPG
ESSSDNSSSDFATGSIAGAFATAVLAVVGIAGALGGFFQQILAAFPALQQVIRF

>aaRXN02406 TRANSLATE of: rxn02406.seq check: 9586 from: 1 to: 549
METLAAQARTLLEKKGWVAPTHASFVESIAKAIPILSILLTLIVTVNGISSGNPVQPPALE
QVRTDVVNKINYERNLKLVSISPELELHTAAQTIAQRNADSDSEEKVPDPEGNLVVLQQ
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STE

>aaRXN02407 TRANSLATE of: rxn02407.seq check: 3013 from: 1 to: 372
MNRQNQLHYEQEVKAVESVESSLNMSSPSAPLATPDVELDVHTLSSNLPWLCIVWDDPV
NLMSYVTVYFQTVLGFSSKKRATELMMQVHTEGKAVVSSGEKDKVEGDVKKLHTAGLWATM
QQAG

>aaRXN02408 TRANSLATE of: rxn02408.seq check: 1367 from: 1 to: 912
MLIDVAGFLLGHVTKGDTGCSVVIAPNGAFAGVDVRGGGPGTRETDLLEPHNSVQQAHAV
VLCGGSAGFLAAADGVMTALENRGIGFVPRPEGPIVPIVPGAVIFDLLVGDPKNRPTAAD
GEQAVENAFAGTHNGSGSVGAGTGATAGRLRGFGQSSRRVGKYTIAAGVVANPVGEVVD
LTTGALFGRPEVMGVGVDKLKSAAETLNTTIGVVATDAPVTKAQAKRLALVAHDGLARAV
RPSHSPMDGDTFFAMSSGDGSGVTPVELAELSAHAADCVDIAIIDAILTASPGLGLKSFR
ELLP

>aaRXN02409 TRANSLATE of: rxn02409.seq check: 5850 from: 1 to: 537
MQQWKKKKGLMRQARYAVVFEPMEREVLGDLAAVSEALIQRASVPKDPPLAEMTGMTSG
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>aaRXN02428 TRANSLATE of: rxn02428.seq check: 3176 from: 1 to: 1134
MAATLDLPDTPDIAYAMFAHCFTGSRFTPAARVSKTLAESGVACLRFDFFGLSQSEGDF
SKTTFNSNVDDIVAASQWLTEHYSAPQLLIGHSLGGAASLKAATKISCLKAVATIGAPFD
PAHAVLHFADRICDVDDQGAVTLLQLGGRDVTISREFLEDLAEVNPEHLRLRKPLLLH
SPTDQTVGVDNAQLIFRVTRYPKSLMTLDKADHLLTKDGTAAQRAARIANWVEPYLVPEN
VCEDLPEFVAEASTIKASKYGAAIRTGGHNFITDRDKSQGGKNLGFPTPTSLLSALAAAN
SQTIKQAAIDNRIKGLDDVKVTISQEQSADHGQIKLRRKISLIGNLSADSDASLRAASNS
CSITQLLAQGIVIDDEVN

>aaRXN02454 TRANSLATE of: rxn02454.seq check: 5811 from: 1 to: 1242
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FSRHLLTVVESEKLIRALSULLVRMHLNLFYWGDSLSNTLFRDAETYSAYLVDAETGEF
QPNLSESRRLYDVDIARVNIIGELMDLQAGECLDKSIDVIALGGLVESSYLELWTELTAE
ESVDASEYWRLSERIDRLNQLGFDVGELKVTKDDSRQVVRIRPVVVDPGHYRAELLSLTG
LSVEEHQAQRLLSIQAYQAVECGPHVGLTQAAHLWMTNEYEPTIAAVPVEMLDKLEPAQ

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>aaRXN02457 TRANSLATE of: rxn02457.seq check: 8018 from: 1 to: 1110
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 QCLPQASSISAMMRKFIAQHCPDDKASSATNDGSIRYRRNKGGISITVDATESEVTEIK
 AALEQMSKDKDCTPGTSLLLHIIRGLPTKVVLNTYGTGKDSPEYLEGGTWLSKEQSEFWKTR
 TTSSRDMDAAHFSYTTAYAPTREMRVYIKGLRTTCSVPGCSVAVENCQLDHIIPWEGGGP
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 GKYMERRIAA

>aaRXN02460 TRANSLATE of: rxn02460.seq check: 7527 from: 1 to: 504
 LRVIYPATFSTLRGLNESRVITARSGYGAFTPALLDFTDGDDEEIAHAAFQDAEASI
 RLLAIGDEETFPYRRVVSVVDVDSVVTYQPENGESVVKLSPAHLNLDVAAIHIDVEAS
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>aaRXN02464 TRANSLATE of: rxn02464.seq check: 6833 from: 1 to: 1200
 MAAKLQPLKRTKKDLIATGVITALAVIGVGTWVATAPIRGSELTPADEPFIGSTTLDAIP
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 AAVATYKTGIGCGDVTAINANDGQYQATRSATSSDHVAPISSNDRIGVLGTERLELWRS
 LVRTIEYGDVEAPQESGQPHPECSITSAMTRKDLLAITEDCPDGSSYLRFMGTTDPDSR
 TPEITQDIEITDGRIVAIGQSVAAVYTNDSPRIVSYNDGELVGEQAVDEVEFPDPFPQ
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>aaRXN02465 TRANSLATE of: rxn02465.seq check: 154 from: 1 to: 399
 MPASIRWGGIVALIQSTIGFGYAFFLIYREATGETDPSIVYETDNANTWVGYGTAFFII
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 FNKRAVLWANNEI

>aaRXN02466 TRANSLATE of: rxn02466.seq check: 2914 from: 1 to: 87
 VEGGEQTFITYVIEIEDGVNTAAYGGDDA

>aaRXN02505 TRANSLATE of: rxn02505.seq check: 6513 from: 1 to: 171
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>aaRXN02510 TRANSLATE of: rxn02510.seq check: 1304 from: 1 to: 636
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 DEDGLIVARGELVYCVLNLYPYNAGHMMVIPFRKEKNLEDLSLAESAEMLFTQTAIKAL
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>aaRXN02519 TRANSLATE of: rxn02519.seq check: 317 from: 1 to: 1629
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 ASVLSMLRRTFGAWVAPIMLTAPLFTQDIYSYLAQGSVTAQGMDAYAGGPLELLGPDNH
 LARSVPFIWAQSPSPYGPVALSIAASISVITNDSIVGGVLAHRIASLLGVVAAGWAITML
 ARRCRVSEESFYLGVLNPLLLHLIGGIHNEISILLGFLLVGLELGLRGTDRIQTGLWGP
 AWTYIALSGVLISCAGLVKVTGFIGLGFVGMALARAFHARGHRHVVAIGVAGLVQVAALV
 ITVVVLSVITGISLWITGQGAATIRSWMSMTTNIIGVISGFIGMNLGLGDHTAAMLVVT
 RAAGIAVAAAAMVRMLFATYRGHIAVAGGLGVATFVLVILFPVVHPWYMLWAIVPLASWA
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 GLH

>aaRXN02520 TRANSLATE of: rxn02520.seq check: 9529 from: 1 to: 684
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 RKRIETIVEGITPADVTDQSIEDTAKSLVEAFSRHGYAATVDATRNGLQLCQHHCPISTV
 ATEFPPELCEAEHQAVSELLGQHTQPLATIADGHGICTTNIALTPIKHS

>aaRXN02534 TRANSLATE of: rxn02534.seq check: 3127 from: 1 to: 804

MNSPNADIILVVNKLKSFIDIEINIMLVGARCRIHQKKYRDQTAGRRTKDVFALALESW
DDFNLLKQQFSPTGNAWQGITIGNIPVDLVPFGNIENPPGEVLSRKGHLLNVAGFKEVFE
QAELYPLNDAIDIKLSTVPGTLALKLHAWLDRKKNIKDASDLALILSWYEEDEVETLWNR
YFALENQGYIGEPEAMAAELLGLDTGRILGHKETQALLDRFNEQSPPELNQFAESLEAPP
EHSHPLERRRIQVEALLGGLRDSLGYDE

>aaRXN02537 TRANSLATE of: rxn02537.seq check: 3878 from: 1 to: 462
MLALKSSELEGIATSLTAVAGALHESNTDRLQSWQQLEMTSASSLIQGFIKLVDYNRPT
VNIVEQMHTASTLENTADFLRTLLEGYVDVLEKQADKSITLTVMLRYIASLSSLLDLMCA
REINALCTAITPEPLKHLGDFGTLPQQSTSTFIW

>aaRXN02538 TRANSLATE of: rxn02538.seq check: 5301 from: 1 to: 672
VNAPPEIRALAEHPDMQILEAGDGLVASFGDIDRATTVTIVAGVGSSNPEGWNTYVD
RARTVSASTGSATVLWLGYQAPASIPAAVSGAAANRAADLQRFQALQSRNPHQRKVVM
GYSYGSTVVGKAASSGELSADALVLVGSPGAGVSHSSQLGAPVYAVTGSADPIGFAQTQY
DGIHGTDPTAALFGATVWDSPSTHSGYWNQDEFLGNVAEVVRGK

>aaRXN02555 TRANSLATE of: rxn02555.seq check: 3981 from: 1 to: 603
MGEQFPGDKNIRVSDTERSAAALGQFYAEGRLSLEETDDRCEAVADAKTRGDLNAIFY
DLPNQQAIAVDRSEQTYTATEVAELHRKGARPRAGILGLTTVLAITGTAAFASTTAFATV
LLALIPIVFIMLYVMKIGPESWHAPTQRQLQRKRMIELREKEKLRDMELKAQRKERTHAL
TNRALDAAETAFTNTPWKKNK

>aaRXN02564 TRANSLATE of: rxn02564.seq check: 3452 from: 1 to: 1002
MAEVGAEPAGSAQSKTKQFVVGTAADVITAIAAFFSIQSASGGEDIRSNMTLIAPAAAGG
GWDTFQREQQQSMRVNKIVNNIQVNIIPGAGGTIALGKLSTMTAPNTLMVGGTGHIAAQI
QFDTPAKIQDVTPIARVVEEFDIITVPADSPYNTLEELIEGWKADPAGVSWTGGGSFDQL
VMTEIALSAGIDPKQTTFIPSDGGGEAIQALLNGTAKASTGGFADMYPQVEAGRLKVLGI
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>aaRXN02568 TRANSLATE of: rxn02568.seq check: 2134 from: 1 to: 1653
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LPTPVAPGGSVPAPRASAPAVPNVPAAPGAAVPAPGISIPAAAPSAPGSAIPTPGTAIPVP
GSATPVAPGVSAPGASVPSIPVPGSVTPPAPGISAPGGALPTGSAPPTPGGALPTPGE
ALPVPGAPGAPGASGIPSPGLPTPGVPTPGASLPVPGAPDAPGTPSIPAAPGIQAPGIPA
APGAPAQAAAHAKPVFQDAEKRPRTDEAGNAKKELPLRVRLAQPI TRKQWAMTLGVLVLG
AIVVAAIAVVLAKWAFTTEWLQDFVEKYPGKYDNPEGAPVGIPTWLSWQHFFNMFFMVL
IKTGIEINRTRRPKGYWTPKKGGKKISLTWHLVLDLLWIINGAVFIILLFATGQWMRI
VPTSWDVFPNALSAGLQYVSLDWPTENGWANYNSLQELTYFFTTFIAAPLSIVSGFRMSS
YWPKNATMNKLIPIGFARALHMPVMVYYIVFICIHVFLVLATGALRNFNMHYAGQDVVN
WVGFGWFVASL

>aaRXN02593 TRANSLATE of: rxn02593.seq check: 9101 from: 1 to: 597
MEAMATTITVFSPTHSPAQIRETILSAAKEDDVDFLGVPFTHPRNVITIEVDDELINDCLG
WLDDVALASGLGIQYNDEVRLRYGDEDISFTVQTKNDDARIGASRLGLEHQLNVIAGGSG
DSGDSGDYKIAHFOLDNPADESSYIFARSLAEVDGWTFLEFGVAGVKNTTIVSSIDDAIT
TILRWMNGEDIRDLNWTRA

>aaRXN02606 TRANSLATE of: rxn02606.seq check: 7692 from: 1 to: 1371
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GKTSHIDALAYLLDISKSEAFRRTKRAEEHYGNPSPEPSSEELAKETPEEKLAREEKEKQ
DLAEQAEANRIAREHGISAQKQDTIRYELEKLNNTSLSRASLRKLAMQEATSRTPEDLR
NWRTRNKVIRINPTAKDPLAAVKKRSLSIGRQDHDGGAASLYLDAKGLALLKSLMSKAKP
GHLLDLSLAEDKRTKPQRQYDAFADILHRAHSDLLPARSGVGTILVLSAKDVTNLKASG
PDHRYPTSTGIKLTPLILRLGAAKYDFVTVLDSESGRPLHLARTQRTASLYQRLALFAS
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IDPTTGRVGYQPADRRKPMRFNNTAAAESGGAQART

>aaRXN02610 TRANSLATE of: rxn02610.seq check: 4081 from: 1 to: 927
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IAAPGTWESAANDDPINPTANPLSFMLSITQPLQERYSADDDVKVWTLPTYAQFRNINSQN
 EMSYDDSRNEGTAKMNEELINTHNECPATEFIIVGFSQGAVIAGDVAAQIGSEQGVIPAD
 SVRGVALIADGRREPGVGQFPGTFVDGIGAEVTLQPLNLLVQPIVPGATMRGGRAGGFGV
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 WATNLIDNG

>aaRXN02624 TRANSLATE of: rxn02624.seq check: 3015 from: 1 to: 1296
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 ITRLLRVMLFHLFSLFGLMGPRWLQALARRYGAPEWLIDAITQAFRELIAGFTVSLVSVL
 VMTAINHSAFTATMQGYDDASVVALIVLSILYLPNMMIFAMGNLIGSPYFGDASISVF
 SVHSVPLPPLPILAAALPSEALSWAVALLVIPAIATWVCVRNPMRLAVNTTAAVISALCF
 LVLAVFAGGTLGVYNYVGLNLLASVGLVFVYFALVGLLIAGIDKLRNPVEVKSVMKAVAVV
 EPEPEVEEDEEEHVVEEVEDEEEVEEGVEVEEEDDAEDPEENPEEEESDEEIEETETEA
 EETNDGSEAEDR

>aaRXN02626 TRANSLATE of: rxn02626.seq check: 9067 from: 1 to: 1005
 MSTQVELKTPKSEDRAAYIAALGFPVLVIIIGGIIGFTASDVVLNISSWVNPLLGIIIMFSM
 GLTLKPVDFALVAKRPLPVLIGVIAQFVIMPLIALLVVWLQLPALAEIAAGVILVGCAPGG
 TSSNVVSYLSRGDVALSVTMTSISTLLAPIFTPLLTLLWLAGQYMPNAADMAVSIVQVVL
 IPVVGGLVVRILFPTLIGKVLPLLPWISVIAISLIVAIVVAGSRDKILEAGLLVLAHVII
 HNTLGYSGLYLAAKFTGQPAARRTTAIEVGMQNSGLADGLASQYMSPMALPGAIFSVW
 HNLSGALLAALCRASDKRAAEKVASEKAASEKAAS

>aaRXN02656 TRANSLATE of: rxn02656.seq check: 1781 from: 1 to: 840
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 AVVIAAAGVLVLTLGLGDKPPYLAITLAFTFGIYGALKKQVKMSAASSLCAETLVLLPIAV
 IYLIGLEASGHSTFFNNGSGHMALICSGLVTAVPLLMFALAAKAIPLSTVGMLQYLTPT
 MQMLWALFVVNESVEPMRWFGFVFIWIAVTIYITDSLLKK

>aaRXN02673 TRANSLATE of: rxn02673.seq check: 5852 from: 1 to: 633
 MAALLVLLVIALIIVAVVALRGGSSPEEEQPNNAVVTSSMESSATSSSSSKESTTEAT
 TEEETSSAEPTATSSVAADAKKTCELSDLVISASTNQPTFSGSAQPELFMAVHNPTAVDC
 EIDLEENKLRFEVYNLATNARIWSDVDCNPAVEDGTSVFPAGEDRYFQATWSRTTSAPNQ
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>aaRXN02680 TRANSLATE of: rxn02680.seq check: 5186 from: 1 to: 1284
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 VNLTDLTEEQQAALNVLKNLLNDDAYQMIEDIMASDQYLNDESNTTEDSLGQYYIAFFG
 DPSSSDSDWSIQFGGHHIGINTTFSDGAITFAPTHLGTQPSWTNEDGETVAALSNNMYETA
 FAFYDSLAEQQAQLYQGEELDSMVCAPGSTCDYPTGTGLKGSDLTDEQKELLIDVIANW
 VGLADEETTELDAIRETLDDTYINWSGATEYDTSTGDGIYFQISGPKVYIEFANQQGS
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 MPSPGAPSN

>aaRXN02693 TRANSLATE of: rxn02693.seq check: 9728 from: 1 to: 1776
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 FIGAEIAMWWALSPSLPKPWWVTAANLAVLQAVGHAAATGIHSILPRNRRVSRKIYNA
 THIATGATITTTTVVGLIRHRTQIRLIGQKNFGPKETIAGISVGTGLYGALLITGELTQH
 SINEVKLLIERFLPPWISFIAAVSVITLTTLTADRVLRLRILHNSAIQAAHLNRMVFPG
 TEQWPERSGSPWSYKKGAVGSQGRAVLSGGPRKDDIITVTRLSDTETHEPIRIFIGM
 VPGRLSDQVDLVIHEMRRTGALRRDHVINNSTGTGWITDWSAHTFEFLTGGNCVTISM
 QYSYLPALSWSYKDNDGPINARMLIDAVLHELDQLPTGSRPKLFLAGESLGAYGLAEVW
 GDVEKLLGTADGVLLSGAPRFSAMNLRTRRDASSERLPVIDSGRHIRFAGEPEHLD
 PATWQFPRMIVAQHASDPIVWNAELFIRPEWLKTPKQDHQDVFPRLRWMPFVTGWQVA
 LDLFTSTSVPGGHGHNYHEEFIDYWAALLDREVTPELRHSIAYWIRANHIKR

>aaRXN02696 TRANSLATE of: rxn02696.seq check: 3394 from: 1 to: 456
 MSMLKKTKEFFGLAPYEAHEDAYYADEPRYEGTAAAYAPEYRERDYGYPEAPAPVAPSP

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>aaRXN02697 TRANSLATE of: rxn02697.seq check: 1664 from: 1 to: 1527
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VGQLLLIGAWVHLGRRLFKKKVADDTADAADLGLVKRTLYAMVVPLIFAAPMMSRDVYSY
LMQGAMLRDGFDPYTEGAAVNPGPMLLEVSHDWRNTTTPYGPLHLWIGDMITTVVGDNVT
LGVVAYKILSIIGLAVTGWSIVRIAQHFGANPAIALWIGVANPVM-IHMIGGMHNESLMV
GLVSVGLLLALKKRKFVAGVALIAVAVSLKATAAIALPFVVWIGMHFFAGFLATKKGKDSP
TLKQQVPAFFATGAAGVAVTGVVVSATWASGASGWWISEISGNSKVINPLAFPSLVASV
ITMVAEVFVDDFDYNAVNVVRSISMLIMLGGLVVCWWLFRQNERRAVTGTAAYAVAFV
FNSVTLPWYYASLISLLGTFKPPMWLIRFAAGASVFIALMFTGSGNHQLYNIVTVIIAAI
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>aaRXN02720 TRANSLATE of: rxn02720.seq check: 5443 from: 1 to: 702
LERREELQVRLQQVQARIDATLNEHNRPEGSVRLLPVTKFHPVEDIKILQEFQVTVAVGEN
REQEARAKALELPDMDFMIGQIQSKKANSIARWAAVHSVDEKIAEALGRGVALALDR
GDRTSDELPCFIQLSLDGDPSRGGTPLSQVTQLADCISDTTHLRFEGLMCPPLGWGPEK
AFSQARDVLSGLEEHFDRSLEFSAGMSGDLVAAIKHGSTIVRVGTEILGNRPLA

>aaRXN02744 TRANSLATE of: rxn02744.seq check: 343 from: 1 to: 804
MSKPFENSALRGSSRFPAFTFPAPKRATPAKMLAAQGMESLLFLRHGEQQLLSIIIPL
VALIALANFDFIPGENSLDKTFPFALATAAMSAGFTGQAI SLAFDRRYGALKRTGASGVP
AWTIIIFGKVI AVIAVTIVQIIIFLGVTALLGWSAPVGGVLFQIVTLFVGVSSFTALGMLM
GGTLLSELVLALANLIWIVLSGLAAWAVFSPSVNAEGVLSIIPSVALSQGMVDAFNDEL
WLQLGILVGLIITGVAANKLFNFSASR

>aaRXN02770 TRANSLATE of: rxn02770.seq check: 2969 from: 1 to: 1566
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YVQGPSPQMIPNTDLASTQVLPGINRQVIYITINEDATYSDGQPVVCDDFLLSATAGQMP
LFQSHVPLTSQIERVDCVSGSKVATVVFKEDLGERWRYLFEQGDLLPAHAVASKAGMTLE
ELNQALKDKDPEALTEPARVWSEGFQLSQFDPQLQAFGPYKVDSVGEFGEVKLVNEFY
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TEQLTLASAGVFYAAEARQAFACVDQEAFAAAASSISGIDVPAVGVSVRHQNPNVHQA
GDLPAQHMAVDINAASALAGQSIRIGYDGPDERKAAMVEAIRQSCEPAGITVIDASQEA
SLNDLSRTEVSEWGYEQYFEGTLDVLRTPVDPHREYENANTIGTDAESTRRTEEQWLAEV
PSIPLAAQPRVFVIDRTVGNVVNTDLAIGWNMDRWSRSEE

>aaRXN02781 TRANSLATE of: rxn02781.seq check: 9745 from: 1 to: 1191
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QLVSSQFSPRLNGLRNRIVQATLAMFLGTFFVSLTVIRYVWSEDEDITGFVPRASVSV
AFLLVLGCLGLFLAFIRLITFSMRVANAI SEIGEETMALAARIYPVQSDDAGPVQGPWS
PRPGDPREIRVGNHGSVLWIDYRKLVSWSSTEHQAVITVDRPVGDFLVEGQPLLRVWWDG
ELSDRRRLVLSAIEVTERELHQDVAFGLRQLVDIADRALSPGINDPATAAQCVQEIHR
IFRYLVTVIEPSPYIADDDGRVRVHQPQRIADMLYEVIREIHLYGADSAMIPRLRLTMV
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>aaRXN02782 TRANSLATE of: rxn02782.seq check: 837 from: 1 to: 1299
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NRTSTKSASSGCPYCANRAVLVGDNDFATTYPALAAQLVDQSAATFTAGHNKPVEWICC
KHEPPFIWKTSPILRVQRNTQCPVCERTVAPALNDLATTHPKLAEQIADPQPSGVSA
IIPNTISRGSHQTLWQCSKNHHDQWVATVKDRVRGTDCTCANTGTSRKEAELIEVIRAL
FPNTDVGQALINGRTGNQGA SPSTDVLI PSKNLAEFNGLYWHSELFIDKHYHANKSA
LAEQAGVQLIHVWEDDWNLRDIVIRMIAHKLHATHNLSAVLPTETDTSRVATTAFVHS
HCRWSLVHALLHS

>aaRXN02812 TRANSLATE of: rxn02812.seq check: 3189 from: 1 to: 339
VWAVAINAGNGISEDQARAASDFSFSFDTGNADNSALESVLTQASSESAAETTEAQPS
TPVEPAAASPSDTIINLDTSSNMDRVVDGSGQETVYHTVTSRTLANLARETGAQG

>aaRXN02817 TRANSLATE of: rxn02817.seq check: 7091 from: 1 to: 399
MILGVPIQYLLYSLWNWIVDTGFDVAIILVLAFLIPRIGRLAMRIKRRVESAADADTTK
NQLAFAGVGVIYAQIVAFFMLAVSAMQAFGFSLAGAAIPATIASAAIGLGAQSIVADFLA
GFFILTEKQFGVG

>aaRXN02818 TRANSLATE of: rxn02818.seq check: 4037 from: 1 to: 606
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LTNAGDLGSLSAKTLDAIIKARQLGKQISFEYRRAPKDAPSLRHMDPWGLVPERDRIYLV
GFDLDRQEARTFRITRVRNIKL

>aaRXN02825 TRANSLATE of: rxn02825.seq check: 7394 from: 1 to: 1839
MKLAPMRMRSPKTF AALASLALVIGLQVPIAQAQTEYRTASDGS LNWFGRQSF RNYIQ
TGVAKGSITLGDGASDNGGNFAFTPR TNGTTVTSDS QGTVEFNGSVHFLGHQAEDKWILD
TTMSDIKMFVNGSSAQLVVDLVAREFKGTTYDDIGEYIISDDIVLADVSLNSAADFSQDS
IDLSGTTDLTAAGAQAFFGGFYETGEALDPTGGSLTISSTTTAPSTSTSTSTASTSGGTAD
CSSGALGVVTTGTNDGMLGTIQEVNNTFAIWNNLIVNTERMFCNIDTLKARFDTDDSSDS
ATSATSGTTASTGTTAATTAGTTGTTGTASTASGTSGTSGTSGTAA TVAGTTP TDNGVCT
ASGSLGVTQASAQWGVKASFQNYIRGSIANGSWTLNGVGF DNQQFQFSGNSGAVDAENKT
GSINFPGSIHFTGHGGILDMQIANIEISFNGNSGELIADVSSDMDGNSTNYGRTTVVGT
NFSALNVSATEASGSASVSLSQSGSQAFADFYTPGTQLDPISFSATLGGDASCATGSTST
TGAAATANTDNTEGVAGEESTTPANQNSQFQIRQAAADSTGLD TTTTMLLILAA FVVAGG
SMTRFTVGNPTGK

>aaRXN02838 TRANSLATE of: rxn02838.seq check: 4352 from: 1 to: 528
NTGKGGGLTVPLGDGQGRYIAKFPSTAFVGVSENEFANLALAEIGMEVPARELVGRAQF
EGVPPEFEAMTDGLVLLVRRFDRAGDGV RVHME DFAQVFGLYPARKYDGAASHDIAAVLG
SAVSIAAGLEFVRR LALSVMGNGDMHLKNWSLIYRGRGDVPALAPVYYMMSTVTY

>aaRXN02840 TRANSLATE of: rxn02840.seq check: 7123 from: 1 to: 150
MTVISGALNVLLPDATDWQVYEAGSVFNVPGHSEFHLQVAEPTS YLCRYL

>aaRXN02841 TRANSLATE of: rxn02841.seq check: 2452 from: 1 to: 435
MFTAFKSNPTTIKKLVSE LINGDDAALNELERHVTNESVRARELPNVQYKATAGRNFAIS
KLVQNLRRINKAQNNPRGVPTHTATVILLKEDGSYDGE EQWRIPEKAITPFDMLRSPDFNH
NRLKNRPLMVESQYPWGVPGLIKMN

>aaRXN02846 TRANSLATE of: rxn02846.seq check: 4539 from: 1 to: 750
VLTIAIVLLASVLIGALLQRM TGLVGLVTGPVLTSLLGPLAGVTMVNGLSIINAVNNAW
SVRKRTDWAKFRILAGALVLGSVPAVAVVYFLNGPWLLIFVGAMVLLALGVSLFPTEKFA
LKQEAKLPMVIFGMIGGF MSTVAGIAGPSLT VYARLSRWDRDFVATLHPVLLVANTVSF
LLKVILIGGLDFGGAPAWLWIGAVAMIFVGAWLGEIVNAKVSTPMAKRIATLLAAGAAV
VLFRGIMELV

>aaRXN02847 TRANSLATE of: rxn02847.seq check: 8481 from: 1 to: 1089
LALTARGFLNSERSQTRWKTHFTTQKVPRSGYRYDL DGLRGIAIAFVVL FHVFGKVSGG
VDVFLLLSGYFFLGSQ LRYADRPDSSINPWWPIWRTLRRLLPALVLVLGVSMVLILAWVP
RLQPIEIANQAVASLFYVQNWELASQGAAYGAASAEVSPFQHLWSMAVQGQFYLFALLS
MAIILIRRYRPEYSAVRLATPVLAVLTSVSFFSAILWHFIDQSVNYYSTFTRFWELGLGA
LLVLHAPRILISAKTKSILA AVGLFMVLSTGFFMDGAETFPGF PALYPILGACLVLGDG
KISVFLSRKMWLWLGDIAYPLYLWHWP LLII FTALFNQEEPSIWLGI AVIMLSLGLAQLT
NKY

>aaRXN02849 TRANSLATE of: rxn02849.seq check: 4597 from: 1 to: 282
SPYPVMISTSADASNVTVRIMGVDTTSVESINNGRWSTTQPNTVRVSGSDCVPSTGAPGF
TTS DTRIISDLSGNEITRET VTTVYDPSPNVCS

>aaRXN02911 TRANSLATE of: rxn02911.seq check: 602 from: 1 to: 459
MRTSKKEMILRTAIDYIG EYSLETLSYDSLAEATGLSKSGLIYHFPSRHALLGMHELLA
DDWDKELRDI TRDPEDPLERLRAVVVTLAENVS RP ELVLLMDAPSHPGFLNAWRTVNHQW
IPDTDDLEND A HKRAVYSGAARSRWPLRLRHS

>aaRXN02914 TRANSLATE of: rxn02914.seq check: 6261 from: 1 to: 543
 MVGNSIWIIASLLGLSALISTYPAILNLLQLVGGGYLTWMGIGAVRSWWTKRSTQQAAD
 SQAVENTLVATAASVGVWPAIRSGIATNLSNPKAVLFFGSVFAQFVRPDMGIGWSIFIG
 VFLLTLGLLWFVGFVAVLVRKLAAGLTRNGAIIDLLTGVIIFIGLGMFMIFEGVVGIGGRVV
 G

>aaRXN02921 TRANSLATE of: rxn02921.seq check: 4157 from: 1 to: 471
 VSALEESIRIATIAAKAADEKKADDIAVIDVSDMIAITDCFVVASADNERQVGAIVEEIE
 DEMTKAGFEKRRREGNRENRWLLDYGLVVIHVQRQAEREFGYGLDRLYRDCPLIEIEGLE
 TFKRESSWSDEADIRNIDSIDELPPLPAEYEPGYEDD

>aaRXN02924 TRANSLATE of: rxn02924.seq check: 3999 from: 1 to: 549
 VPSVASISERATFILTADHFLRSCSKVIYVRGENFTATATTSLSVFGTDLGLIKLDGKAP
 TMPLPLFADKPLRVGMKTTTTFGFGGLPSATVAKEIHGRVISAIPHGVSRNRITRVHHGAL
 IFNSPEKAVKGDSSGGPVLVNGRVAGIQSMISDPGGFNTGVATAASLIQHMPALAAQALELL
 EHS

>aaRXN02927 TRANSLATE of: rxn02927.seq check: 3221 from: 1 to: 468
 VADEGSILAWFPCGDEAPVLVVTLCFAIFGEVVVAEVSATGLVAVEGVDTHEFAEVDVVG
 YACCVFENLVHLIGAAGDAHVLPEVIAEGTDLVDAILEVFYVSGNATGEVQDIKLAUVV
 LRSVNVVTDPLWAVAHEAVNASLCTRNRCCLFCWCIL

>aaRXN02928 TRANSLATE of: rxn02928.seq check: 382 from: 1 to: 693
 VAGRCNTHWAGVWVLANCLFVHGEEVGVTLDAGVLSEALGGVAEVQVCSVQVRSNTETSI
 DLLGDRTGSNVTWDEVTECWVAALQEVVALILRDGVWIAVIVRFLRGPDAAVVTQRLGHQ
 NGLGLPGGVHRQAGWVELDERWGREVCAGFVCTHGRGVGVGLQGQGHVVHVAVATGCQDN
 GMAGVCGELAGDQVAHDQAFAALFTVTFGDNDVNHFMGDFYGAEVDLAL

>aaRXN02931 TRANSLATE of: rxn02931.seq check: 8393 from: 1 to: 225
 MQPYPRNPIEKRKQEVKNSRNAVVSVGGGIVGGAALWLVFSGSAFFMGLGLIIAVVGGFY
 YYNKVQKIINEKDRY

>aaRXN02932 TRANSLATE of: rxn02932.seq check: 938 from: 1 to: 972
 VSKTEEGRSAAIIYAFPTFILLGAIIFAFPEPFIPLTNYINIFLTIIMFTMGLTLTVP
 DFQMVLRPLPILIGVVAQFVIMPFLAIVVAKMFNLNPALAVGLLMLGSPGGTSSNVIA
 FLARGDVALSVTMTSVSTIVSPIMTPFLMLMLAGTETAVDGGGMAWTLVQTVLLPVIIGL
 VLRVFLNKWIDKILPILPYLSILGIGGVVFGAVAANAERLVSVGLIVFVAVIVHNVLGIV
 VGYLTGRVFKFPEAANRTMAIEIGTQSAGLASGMAGRFFTPEAALPGAVAALVHNITGAV
 YVGLVRNRPLTKASRKESVAVSS

>aaRXN02934 TRANSLATE of: rxn02934.seq check: 3200 from: 1 to: 306
 VGADEFDFIFEIDAPEAGFALVDAGGVSFVEFPHAGFEGEVVFTVVGEGDLLAECVLSV
 FCGVGLAFAAPDADEREEREESVVEVGAFAEVSGVVRDRKVT

>aaRXN02936 TRANSLATE of: rxn02936.seq check: 3720 from: 1 to: 198
 VVAPFQLVGLVSVQLRSSFSEPATEEAEDTEAESPTTPTGLPAAAASIATLDNASARLFF
 SRGIHV

>aaRXN02939 TRANSLATE of: rxn02939.seq check: 7866 from: 1 to: 1602
 MNLHSLEIRQISSGTISERKTWIFPTAARSFNQNVLHPQSIEIDAQTGVILAMENRLQRT
 EVESVEYPTDLPNPAWTGPAISWPLKDPSIDFPDPLPHSISELPPQSDNPRHLRVSISLD
 AVEGAFPRYRIGDSIRIPLVFARDTPFMSGLETRRAWIEAATEMDIHNTWPIILTGDGW
 TALSHSDKPIRHEAELKGWFFHSLFGSEMPPLTDLKIERIYGGGLGTFDSGATRWQELTDT
 DAYTENGSWLLEIVDATLDGAIPPLQPQFEASITHIVDEQLWVLGQMLPVLRCWDLE
 TGKYLQGTYPISVSHSSRLQFSEGLIHDYENAWSLNPGVRMLAEPQPWIEPVIELDVPA
 PWELQESFPDGLYSLTDGEQTALGRSTPAGQLEICVISNDGSRILNAGRVEDLYFVQFWG
 MTVFLNSNFQVQSAEEHQLGAKRERWITQEGVAAKFTEEDEIVFLDQISESEITRWKTPE
 GYFTEVRILSPNHFNILVTPPTGSDYLPVPSSVSFVRDQWSNIKFEDVSVEI

>aaRXN02950 TRANSLATE of: rxn02950.seq check: 7742 from: 1 to: 324

MTVFNVLHDAPAPQPDKNRPGVKRLLQGDGANLIAFTFSPGQSLPDHRAAHPITVTAFSG
QLTFSYGEETFELSPGVTVHLEAGVTHRVDPCPEAPGDASNAVNYAHW

>aaRXN02951 TRANSLATE of: rxn02951.seq check: 852 from: 1 to: 609
MSSTLARKASGDGSEKKKPGFLRRALRFLTHPPHKQVDNSLADIREGLGLGVDDSHESGSK
PSNDHSLLEHKEPISVMPTESMARLIFYAPDMGQTDGPGEVWVIWAPADGPQQPPKRRAI
VVVGRNRNAILGLLISCNPEHRTDEDWIDIGSGSWDPRGRQSWVRLDRVLEVPELGIRRO
GTVVPPGREFRIANRLRNDENWV

>aaRXN02957 TRANSLATE of: rxn02957.seq check: 2405 from: 1 to: 291
MQTAQGGVRVYTSMLDEKSLSPILGLPGRENIGLGRHWHGLSTMLRVINGIVYVLLFATG
LWQGIIPTSWDVFPFAWETLKVYLGFRAPIEHFTPL

>aaRXN02967 TRANSLATE of: rxn02967.seq check: 8901 from: 1 to: 318
MDLLVVAVHEGGQPRQSDCNAPGCAHTWLCAINFQLGAGVVEGGVEKRNVFFGGTFLGPE
YGGRALRAGGGGVDIGEQDPFDGGCGDVEFGGIDVIEVDEVGATGS

>aaRXN02971 TRANSLATE of: rxn02971.seq check: 4841 from: 1 to: 312
LIAIVALIVALVWLFNRSDSGSTTTTSQECISGNLSLPVGGDSTAAEELVNKFNDSPP
VSRDFCVAEAVDGNVPAATYLFAGSRSDAATALAETGAVASSS

>aaRXN02978 TRANSLATE of: rxn02978.seq check: 8219 from: 1 to: 1509
VIDRPVWLFELYNTAKEVVYSLIDQVTGENTILKKDDGWRDQFMIESFFAYDSEADATS
WSGKNMNSYWFVSDNISFAERSLESFSWALRDLEDLSSSETEFEGLEELNLKFSELO
EWYTNLELFPQPSAADVDEVEQYLQAEVTRQRGDYQWSPEFWIPKPDSEYIDHALAVTD
VLGAIEQGEELREEVEVQALDEVSENNPLEDSDYLLQDHRGRPVQDLSREMEELVRCML
LDQEWGGAERIRKLVSVEWEDTQAISSLIEHEQYWEDGRFRPPLHKFSEGLDEPEPLP
MTRKMILATNHPDVLRVNIADYYQQHRIATQKVECYKEVLALYPEILKKFDDSSSFVNRH
WIYRAFDREGQLLYIGETINPLVRLREHAGLGSINHAHRLVSPWFSTMATFHLESCFTQ
AEAKEKEALYIKLEQPRYNKTHNSARLAVSEEGVPVNEVPSRNDPRNVGWKGHRHVPML
PIVARVDESTTREGYAFYEDNR

>aaRXN02995 TRANSLATE of: rxn02995.seq check: 169 from: 1 to: 1566
LNHAKVNQHPGQATLPETAEGQVRTYEVKTYGCMNVHDSERLSGLLEEAGYVAAPEDTT
PDLVFNTCAVRENADMRLYGTGLNLRSVKEKNPGMQIAVGGCLAQKDKDTVVKKAPWVD
VVFETHNIGSLPTLLQRAEHNAQAEVEIVDSLEQFSPSVLPKRESAYAGWVSVSVCNNT
CTFCIVPSLRGKEQDRRPGDILAEVQALVDQGVTEVTLLGQNVNAYGVNFVDPELERDRS
AFSKLLRACGEIEGLERVRFTSPHPAEFTSDVIDAMAETPNICPQLHMPQLSGSDKVLKE
MRRSYRSKKFLSILDEVRAKIPHASITTDIIVGFPGETEEDFQATLDVVKKARFTSAYTF
QYSPRPGTPAAEYENQLPKEVVQERYERLMVVQEQQVCEENQKLIGTTVELLVQAGGGRK
NDATKRMSGRARDGRLVHFAPEGDIDGEIRPGDFVTVTVTEAKPFFLIADSGVQTHRRTK
AGDNSAVGQVPTTAPIGVGLGLPQIGAPKVAPATESACCSIN

>aaRXN02997 TRANSLATE of: rxn02997.seq check: 4243 from: 1 to: 729
PLPGQPFEGEALTILINALLHHAENVAASNPKRTTFHTAHMHPPGSNADCDYCLVLQRRG
YVKAHEEIIQQTIPSPGDSAGEFTVVDVEGTAFPSALIPSIVELQHRAALDVPHGNLSV
APAQWDEHRLAQQSERILKTGTLFTVLFAEGSTVAAMSSIAIPPGSNPDIAEQGLTIVH
PDFRGRGLGTAVKLAGLSLLSRCHPEIQRVATSNVNDHAMLAINRSIGATEIARTTLWE
KKL

>aaRXN03001 TRANSLATE of: rxn03001.seq check: 9853 from: 1 to: 453
MDWLTIPFLVNEILAVPAFLIGIITAVGLGAMGRSVGQVIGGAIKATLGFLIGAGATL
VTASLEPLGAMIMGATGMRGVPTNEAIAAGIAQAEYGAQVAWLMILGFAISLVLARFTNL
RYVLLNGHHVLLMCTMLTMVLATGRVDWIF

>aaRXN03005 TRANSLATE of: rxn03005.seq check: 972 from: 1 to: 768
MSHKFSRRFAVLTAATAISTSAFATTAPSAIAEPVLMSCRRFQRRNFRKLPRGLGQFL
AHLCHRTLDWWNRDATGGATVNEDGTYNFTLGTGSNDVDTEKGQLNYEGTVAFASDAHG
FNITLSNPQITVEGDTATLSAELSDNAAPETSTTRVDVAEFELTAPEVSETDADITYTW
TDASGTFFLETLPPEELSRAGQEADALSFSITVDKASENPSDDVATGSSSSFLSTILNLF
QQLASPLLKLFGLSS

>aaRXN03009 TRANSLATE of: rxn03009.seq check: 8107 from: 1 to: 348
 VANIASLYGLWEGSTSTPIEQLVPAKGSSFRLVRSFYRRIDGQAVQARLKEKILNTAENP
 LPRLDIPGKERTAQYPENPDFTAQKAAQEILDEFRTPLIGEEAAAHEVKTCTIFWK

>aaRXN03010 TRANSLATE of: rxn03010.seq check: 697 from: 1 to: 237
 VPTDNLFLIVAGIAWVLGILSVLSIGKYMSAVNERKSTGFYTEVPWKALFTATAVLLV
 FAVVWSALDIALWVGKQSW

>aaRXN03011 TRANSLATE of: rxn03011.seq check: 6364 from: 1 to: 201
 MAYETDSLNRRTLGPASAVVGIAGVAVVGVSMISGQDTVPTGNAVTTADDALLGGPE
 YGSREAD

>aaRXN03012 TRANSLATE of: rxn03012.seq check: 8240 from: 1 to: 570
 TTINIIITNGAAPHTNLNRAEIHDLPLTASDSELTRPSQESVLYDHESETVLRMTMVIP
 ADLHVAMKHLAKKHNLTVTEISRILLQRYIDRNINHVEQNQAESDMVEVFASQPTNATAM
 IPVPGTSFRQIFIKHSTGFWKNIDHDLVDLDASKTPRVRDRSVLPQPQLHRALLSDADMA
 RLAAQLTDKH

>aaRXN03017 TRANSLATE of: rxn03017.seq check: 6478 from: 1 to: 1539
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 ALPGETGWVVMLPTHDSQFGGLNAKEKNREDKGTIINLVVNDIHSVVTPELLDSDVLG
 VIPDADSFRMDDEFLLRNKARWHYGVAIEPDTGELVVFKVPAKNSASARGDIFSEVGD
 VLSGAADLEDVVDVEVIATFLEVLNETSEVDIDDEDGDVPYGLEGVNAAGVITDDLIREK
 LDVDSYPSSAEIIDNIVHVFTKLQKGHHVAPQPVLSHADVVVDVAQESHDTVVIESPDDV
 ALAEQVDVPDFSDGFGIDDAEVTEPEDEEVVEATADADPFGDVAEDDPFGSDDEPDFGAS
 DVVAAPAPVAGMSDEQIQALIRGVSESVQAKTGSELNALREELAQAALAYNPVQDSQAALA
 QVHAADARSFDADQVGDAVTKRYVNDLGLYVDEANFNALTRAPFQVAMPQFQETTPWL
 GDQLRTLVAVFNGQLLDQHQRDYRRSARDVHCA

>aaRXN03018 TRANSLATE of: rxn03018.seq check: 6149 from: 1 to: 993
 VTTEEVRAMYIALNDRSNLEIARDLGLDNKDSEFYEVYRAIERDRDVMAGDQQRVESERR
 QQLQQEYEAANREEYVMAKIAEQRVEYDRRHMPRHTASLEAVGRELTSLRDRITIEDYTARM
 NTLRRARAGERANAAESRIIDELRPIVERQALQRAAFDGGFIVDLDKFIADHREDDLRLA
 SVNEQKLAADNRVAQLTKEAEERIEGIRVETDKMIASQRKALERQEAFAELKRRDTIV
 AASEERAEREITARLDAEAALKRMEEQIRVNNEAHEAEIVIERDRATQAEANSMTFVES
 VKQQDRSNNIILIAVLIVGLIAGMVAGAAFF

>aaRXN03024 TRANSLATE of: rxn03024.seq check: 8954 from: 1 to: 1416
 MLERTQVFVDTSYLLASFYNWETGARAQLEIDLPEVVGVLGRMIEQQLKQPVQRQMWYD
 GIPDSGPHRYQALRTCDGVQLRAGQLIEWGERRTQKAVDTRLVADLVLAGVRGQCSDIV
 LVSGDADMIPGVQEAANAGLRVHLYGFGWDSMSSQLRHCCDTTITLDPREDFAECMQLQV
 LEGPLPPVVRVKPINDAEPIEDLDFTPVPGVASPFEEVSAKDEKFSRPPSEPAEALSEQV
 CEAQYEISKHEGQTADSGEITESFEAAEIKVTEFFGEPAPVAESGVEAPTPEAPTVEA
 AKPTPAKPKTPKAEPQKQESPKPGTPKPKAPSPADIPKAPADTEEHSEVEAEIEDSRPK
 IPSPSMMAPRRKLRSRYVPLPNEVWATAGFQTPYDVGGQYASWWFENAATSTQRDQAHLL
 SGGGLPPEIDRPLLQFACETLHEYTLTEAQRVALRDGFHSGIRGVLLNQDSD

>aaRXN03025 TRANSLATE of: rxn03025.seq check: 3655 from: 1 to: 873
 MANPLSKGWKYLMAFNDKNIDENADPKIQIQQATEAAQKQHQQIMQHASQIIGQKQKLEM
 KLNRLVTDRDKLQEQARQAIQLADKSANEGDSVKAQEFNNTAEVFASQLVAVEQQLEQTT
 ALHQQAEVAAKDAVAKSKESEMRLKEQMSQIDALRAQADQAKMQESVTKSMDSLNQFGTQ
 DSSVPTLDVAREKIERRYADALGAQELTQNTVSDRMAEIAQSGTDMRASARLAELRAEL
 GTSATPKGQLEAGVEDAEELIDETSTPSATPETASPEADAPEASADESEKK

>aaRXN03027 TRANSLATE of: rxn03027.seq check: 7054 from: 1 to: 135
 MENVYEFLGNLDVLSGSLIGYVDFDLGASSKWAGAVADLIGLLG

>aaRXN03029 TRANSLATE of: rxn03029.seq check: 3295 from: 1 to: 513
 MFGVGYYTTAHLRLSTLQRPNLRGIPLTFVSVDRAGNMSKRQSATGFHFTHYGGTCPLWNV
 FETFTNPGQVLRQFAQMPDGRNYLWISRTVVRHHEARFGEVDKMFAGLGCARHADRTVY

SRGFNLQDLSTATPIGSGCRVCTRENCAQRAFPVHGRINIDAHESTIAPY

>aaRXN03031 TRANSLATE of: rxn03031.seq check: 9392 from: 1 to: 789
 NNGLNAMAAMTNLPHLRAIQERYYFLSIRYLASIMIAVAKADPTLWEELDLRITDALTPV
 TAGEVMIQSSSTLSKRIA AWIKELDPEPTPEPIPKEDYVHVHTTDEATYVRIKISGPNRLI
 LNDIITQLKDDTDSDSLPEALMAFLMEKIQLKITKYLFTPHKHPEQVWSPDYGDIGPEAY
 ANATLVCAKDLDEVAGATEKSYTPSEKMKALIRARDGHCRCFPGCCVPASKCQVDHIIPWA
 EGGPTAAWNLLCQRHHNMKTD

>aaRXN03032 TRANSLATE of: rxn03032.seq check: 9767 from: 1 to: 285
 MTDGDLADISPRQIGLMTTRTVVEIVRLRHMQQLERATIMENEYLKEIAALKKELAH
 YKQKDHQNMVIDILGKAIGTRPNPGEGLDEEDAT

>aaRXN03034 TRANSLATE of: rxn03034.seq check: 6067 from: 1 to: 660
 FPPDRISANGRRYYEPQTRLEFMRIYTTLPHGYRQPFLLKANNIGHCTVRTLAAISTFSR
 LPFAFDAAHFRGIERTTPVDDVTTLTADDKRDVLIGYLAQPHGQGGQFLTFYQLRKHTIM
 AWCAAMTDGDLADISPRQIGLMTTRTVVEIVRLRHMQQLERATIMENEYLKEIAALK
 KELAHYKQKDHQNMVIDILGKAIGTRPNPGEGLDEEDAT

>aaRXN03037 TRANSLATE of: rxn03037.seq check: 5439 from: 1 to: 186
 MSVDDLYAVALDHTGKPIPCVLCENAPQIVIYDGCCSLAYTQALGDLAEAEYYGADLAA
 AA

>aaRXN03041 TRANSLATE of: rxn03041.seq check: 9452 from: 1 to: 498
 MEGPEAFTVAAIAAAAGVSPRTFHNYPFSREDALVQFVIRVQELTDQLYEFPTSVPPRD
 AIEQLVINQLRDGDAMDSDFSAMFRIGEILENLDPIKVIDKERLIAPLLEFMVERDKDL
 DKFDXGNSDPFACSGNCLAAAYVLPSPFRAPGHRRWSRIDPSGMRDL

>aaRXN03045 TRANSLATE of: rxn03045.seq check: 9805 from: 1 to: 996
 MSITTHVQALTTALNAIDNHLASMLDHGVTPDQYKAIEPDLIALEHTINHHATIAAQTTA
 LAERTNAAQSIGSTHLIDYLTTFGLSKARAHHRINLAHSLYPIPKPNSGSGNGGNGNP
 DGGPDGGDSGDDSDGDDPDPEPKPEDGKPDSDKPRRPRISAEKHAIITDELARLNPNT
 TPSAEELRNQALSQAIWRTPEDLRTWLRHQVTTANKNNPNPITAMKRRYLSVGKPDADNM
 VRISGLVPAATAALITANTAPLTKRGNLVDLPAAEDMRTRGQRHADALHHIMEIYNHGIV
 TPARGGTASIIISMTTDDLDEINHANSSGESL

>aaRXN03046 TRANSLATE of: rxn03046.seq check: 2540 from: 1 to: 336
 ASIANSTLNIPVGLGGSNLLLKAQTATPSEPANAQDKLYRFCIANGKRAFSDAQRFLLNA
 DELAELSDYERLAYAITLLDQPGKEAEGRELFPPFGASPPGLPRCRFLGIPDC

>aaRXN03047 TRANSLATE of: rxn03047.seq check: 8954 from: 1 to: 1416
 MLERTQVFDTSYLLASFYNWETGARAQLEIDLPEVVGVLGRMIEQQLKQPVQRQMWYD
 GIPDSGPHRYQALRTCDGVQLRAGQLIEWGERRTQKAVDTRLVADLVLAGVRGQCSQDQV
 LVSGDADMIPGVQEAANAGLRVHLYGFGWDSMSQLRHCCDTTILDPREDFAECMQQLQV
 LEGPLPPVVRVKPINDAEPIEDLDFTFPVPGVASPFEEVSAKDEKFSRPPSEPAEALSEQV
 CEAYQEISKHEGQTADSGEITESFEAAEIKVTEFFGEPAAPVAESGVEAPTPEAPTPEA
 AKPTPAKPKTPKAEPQKQESPKPGTPKPKAPSPADIPKAPADTEHSEVEAEIEDSRPK
 IPSPSMMAPRRKLRSRYVPLPNEVWATAGFTQPYDVGGQYASWWFENAATSTQRDQAHLL
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>aaRXN03048 TRANSLATE of: rxn03048.seq check: 3655 from: 1 to: 873
 MANPLSKGWKYLMAFDNKIDENADPKIQIQATEAAQKQHQQIMQHASQIIGQQKQLEM
 KLNRLVTDRLKQEQARQAIQLADKSANEGDSVKAQEFNNTAEVFASQLVAVEQQLEQTT
 ALHQQAEEVAAKDAVAKSESEMRLKEQMSQIDALRAQADQAKMQESVTKSMDSLNQFGTQ
 DSSVPTLDAVREKIERRYADALGAQELTQNTVSDRMAEIAQSGTDMRASARLAELRAEAL
 GTSATPKGQLEAGVEDAEELIDETSTPSATPETASPEADAPEASADESEKK

>aaRXN03050 TRANSLATE of: rxn03050.seq check: 8926 from: 1 to: 966
 MSITTHVQALTTALNAIDNHLASMLDHGVTPDQYKAIEPDLIALEHTINHHATIAAQTTA
 LAERTNAAHTIGSTHLIDYLTTFGLSKARAHHRINLAHSLYPIPKPNSGSGNGGNGNP
 DGGPDGGDSGDDSDGDDPDPEPKPEDGKPDGDKPRGPRISAEKHAIITDELARLNPNT

TPSAEELRTQALSQAIWRTPEDLRTWLRHHVTTANKNNPNPITAMKRRYLAVGKPDADNM
VRISGLVPAATAALITANTAPLTKRGNLVDLPAAEDMRTRGQRHADALHHIMEIYNHGIV
TPARGGTASIIISMTTDDLDEI

>aaRXN03053 TRANSLATE of: rxn03053.seq check: 9689 from: 1 to: 1524
FHFTSTEFAGSYSLVTNGLNDVAGEYVGVMRGDVNNASVLFVDVDRWSGHVVCADSSINTS
PLLKRPRVDMWGSKISQAALLNNRRRVHLVLNGAKLDEMGPKESTAHVDMTSGDLNM
FELFGKQEDELSTHMDKIVFMTEQALGDKTSELALLRGKLEITAFYVDMKMWALN
AGENRDKLRLVGVPHQIPLLSVFVSYLDQEYERQKYEGTKDPEMFRAISVLRRLTYKDLL
DTHGDLFNQHTADGIDSVNSARRVIYDFSGVLRRGAGVAMAQLVNVIGFAVETLGQGDVV
IIHGADGIVDQDYLANQFAYMAERGGRVAYLYSSMDAMLGTVGFNQFQRAAYTILGP
MNVDSVDTYQSLINSQIPMDLARLVTTQNSGASYLRRGSTNVVFETNLALGVNPYMEQRR
KIEAQRGQRRSKRDKHYGGGTTMVGTAIDLVDVVAIQAKAEHREERFDEKSARKMKELDDVE
AKELALKTGPKNLDDALAQVEKKRLAKR

>aaRXN03055 TRANSLATE of: rxn03055.seq check: 6322 from: 1 to: 429
MEYDKLILLFLSEQDSSYECCVGLLDGSDGRDYIEKLLKGRKLKNHFLEWEDINKADVAR
EEIYKQGLVHLVFTALSTPGEISFVFPQSLMSATLEEDFAALVLEEERTSFRPELSHL
WSLPVGWVAPGLEGFVERNSEA

>aaRXN03059 TRANSLATE of: rxn03059.seq check: 9601 from: 1 to: 480
MNSGSTMRRIISLRNIGAHKVRFLTVLAVVLGTSFVSGAMFTNALSSFTFDEAIASSFDG
VDVVVSPNGASEVQGVVETVESLREDSRINHLNINGSQTVVLADADSKAIQTTGGSSLS
IYYSADDAVAQAPELAEGEAPTGTTEEVLASKAGAEANGLE

>aaRXN03062 TRANSLATE of: rxn03062.seq check: 8000 from: 1 to: 522
METPTQDMVWRWLYTQSQLKREILPTNKTFDVIQISELVDPTDFIRNSVVLVSVGIAFA
ETPDGLRDWAHRLADAGVIAIGFGSGLTFPQVPQALIDASLHLGLGLEVPREIPFISIT
SSVRDEQTRRAGRLQQLLEQLERLNSIAISGGIEALCRAAADYLGGAVTIVDS

>aaRXN03066 TRANSLATE of: rxn03066.seq check: 1968 from: 1 to: 663
MTSDKDTEQLEAAGTEILMPRRRPAQQRSRERFNRIITAARSVLVDLGFESFTFDEVAKR
AEVPIGTLYQFFANKYVLICELDRVDTAEAVAELKKFSDQVPALQWPDILDEFIEHLARL
WRDDPSRRAVWHAIQSTPATRATAAATEKEMLEIIAEVMRPLARGAGYEERMSLAGLLVH
TVSSLLNYAVRDVNSSEEDFDSIVEEIKRMLISYLSVATG

>aaRXN03067 TRANSLATE of: rxn03067.seq check: 3872 from: 1 to: 171
VMTAWGAFGEKKNYGKIVQGVIRSTFLINADGTVMKYNVRATGHVERIVREITAA

>aaRXN03068 TRANSLATE of: rxn03068.seq check: 9072 from: 1 to: 120
TKEACDFRDSLSNLDLDIAVVGISPDPVDKLVSSVRTMS

>aaRXN03073 TRANSLATE of: rxn03073.seq check: 8068 from: 1 to: 630
MDSVNVLLIGIIVAIAALLPRKGKYGPIATLLVAGDWLGVFLLSILVMLVFDGLEDLVQG
FLDSIWFGVILLVTGIVSFVATLVSKTDSTRKLDGFLAPVKTPSWKTGAGLILGIVQSA
TSVPFYAGLGYLSVGNFSPEIRYGGVLVYATLALSPLIIVAILVGMVRKYPESPVGRLFE
LIGQNKERVTKWSGYLVSLVLCIMGITSIL

>aaRXN03085 TRANSLATE of: rxn03085.seq check: 6690 from: 1 to: 351
MSIHIKVDHVLKGEKTYGTTILVDRLWPRGVKKDDLEPDLWLKSVAPTTELKWFHDP
AKFSEFSTRYTEELNASNDKDLTLDATSRHPVTLLYGAADRDHHAIVLAKWLKK

>aaRXN03089 TRANSLATE of: rxn03089.seq check: 2217 from: 1 to: 1158
HSLYPIPKPNSGSGNGGNGNPDGGPDGGDSDGDDDPDPEPKPEDGKPDSDKPRR
PRISAEKHAIITDELARLNPNTTPSAEELRTQALSQAIWRTPEDLRTWLRHQVTTANKNN
PNPITAMKRRYLSVGKPDADNMVRISGLVPAATAALITANTAPLTKRGNLVDLPAAEDMR
TRGQRHADALHHIMEIYNHGIVTPARGGTASIIISMTTDDLDEINHGDHGDGSLNNLYP
TNTGYSNLAEIMNLIAAKYDFAVLDDGETGQPLNVNRMQRSANLTQRIALFASSELVCSA
PNCDRPQLECEVHHLDPMWRGGLTNLVNLTHQCFNHHPRNDDSRSGVNGKGFMDRDPVTG
RVGHYSASGEGPVFNRSAAADRSGGA

>aaRXN03098 TRANSLATE of: rxn03098.seq check: 3946 from: 1 to: 624
 MPTTDFVFNVRLEPLADPARATGMASYMRDQFSFLGIPSTPRKEACKPVLSALKELDT
 DFVSDCFGAAEREYQYVACDHINRVGITDLGFAKALVQTKSWWDTVDSLAKPIGAKHDDD
 LMKTWALDEDFWVRRIATHQLGRKKNTDAALLAWIEQNLGSSEFFINKAIGWALRDFA
 RHDPSWVRAFVDATDLSPLSRREALKNI

>aaRXN03099 TRANSLATE of: rxn03099.seq check: 8629 from: 1 to: 675
 VVDAVHDVQLIALARRGEYNLGNALGLEVLGQAFVTPAAGVVYHDGVIDAVFGVINGGW
 VIGVDDLWDGAVGPDDVVVIIGGDGAIESTVDRIITQQGCALDQVFFTFADHDGAQTST
 VIQCLAGNQDAGQQATDAAETVQHDISWVDVGFRNTDRRESVLQEGTQVGAFGFFEAVGQ
 LSQVDRCGTKVHIYQFAQNIQGAQFQWKFLGYDVAGVAVRLDDIDV

>aaRXN03104 TRANSLATE of: rxn03104.seq check: 6257 from: 1 to: 177
 LELNAWEDILDLLSWSGSGNGAQDQTVIQVLEGFNAIVILANKQSLVGKQVWATEVDGL

>aaRXN03106 TRANSLATE of: rxn03106.seq check: 1318 from: 1 to: 192
 MSASFDDPNLISLAGLVPTMHLADAASLSTLAQDRLSITGDKGANAGAKIASLVAGMVAG
 ADSI

>aaRXN03107 TRANSLATE of: rxn03107.seq check: 669 from: 1 to: 201
 MSDFSNAEEDLTGKAKEGFGGEATDNESLADEGRADQAKADIKDAVENAGEKVKDAANKVL
 GAFKKDD

>aaRXN03113 TRANSLATE of: rxn03113.seq check: 5526 from: 1 to: 1599
 VLDFLANPLIALVILAVGLAIGQIRVFGLSLGAADVLFVALVSTANTDIVIPMIVYQ
 LGLAMFVYVIGLSAGPAFFSEFAKKGWKLTFMLLLLATLIGLAWVLIKSLGLDAAIGTG
 MFTGALTSTPGMAAVVELIEGIDPSLASEPVIQSLAYPGAVLGSIVVAAVGAALLKVNH
 REDARKEGMITAPLVWKGVLKPGITGRVGDLPRLAGESIIATRIVDDPHTRHADPDL
 ITEGMELLINGTEEAVDRAIKALGEERETKIEDTELIYTRLTVSSPEVAGRTVAELDTVA
 HGFMIARIRQGDSEVVVPKPDVINYSDRIRVVVAPGRVAEVRRLGDSEKSLADVNLLPL
 AIGLSLGLLLGAIPILPGGTTMSLGFGGGPIIAGLILGALKHTGPLTWQMPFHANRTIS
 TLGLALFLAGVTSAGAGFRAALTDSSSLIYMAGGLVITLASALLCAVIGMWVLRRLRWDE
 AMGVAAGTTTNPAAIISYLNQGTGTDLANRGYATVYPTAMIGKILGAQILFLLL

>aaRXN03115 TRANSLATE of: rxn03115.seq check: 582 from: 1 to: 399
 VGKQEKLRIPLDVPGVESEEVGVELLAEGYYLVATLPAVAQDCALGDVRAHHVDEVLEF
 QEVAVAGGNKTLRVLVDAIAADHVRAQLETGLHVEAPMSEMLTVNIAPDSPSHGLEILL
 DDLHAQGVIFRAL

>aaRXN03122 TRANSLATE of: rxn03122.seq check: 3973 from: 1 to: 147
 MTAHHEGAVDMARDEVTDGQNPQAIALAEQVIEDQAEIAEMEHMLNEL

>aaRXN03134 TRANSLATE of: rxn03134.seq check: 1542 from: 1 to: 351
 VAWRVGPGSHEHDIVGSSGFGSEADGGFFPASEGLALDNGAGDAAVDVGVSIDVVKPGA
 DFGVGEGLSEAGESEVVAVLEFDGFIEVGGFHQAEDWSEYFCEVEEGSWFDAFFDAG

>aaRXN03135 TRANSLATE of: rxn03135.seq check: 3240 from: 1 to: 729
 LVLDERWVGVLVDKWDEGGVEKRLFAAVLCVVGAGRGHVDERGEVRYGGAEALLSLEG
 RVVGVEVEDGGHEVFARGVFLEAAHEVRNGHVEFLWAHGWIYVKKQLTDVNADGARLIGRH
 ALQHFELHTVRYPTLHREQMCECYVEKVVAGNAQAALHVFFAHRPIEDALVIGIGGLFG
 RFCGNWPAGDLRVDVLHRQISTLDQANLNARPACVDALAAELRQVLDCTEGIGKVRQLQHN
 SGF

>aaRXN03138 TRANSLATE of: rxn03138.seq check: 608 from: 1 to: 471
 LDIVPKDVAESFAVGEVFLRVLGDGVDDVPVHSIDGGSDFGGSVWGEHSERAVVLTGT
 ARTGGSCVVKQISYFFYLASYGRRWQNLVAGGGGEVFGEDCVGAGEVVGVDAGEFVANG
 DQSGEVEVVQLLQGFEEGQVGERGKRDGYAGDLRFC

>aaRXN03140 TRANSLATE of: rxn03140.seq check: 4447 from: 1 to: 249
 VKGIHQEISRIERSHDYLWSVREDLHARFDNQLKAHFVDSVLDSIAEGYEGRINRFRKIF
 IEMKAVEELRTIAATRPSHLLAA

>aaRXN03141 TRANSLATE of: rxn03141.seq check: 2295 from: 1 to: 330
VVEATGVAGGNHVATVWHAGVLGVEGCFVDEVDVDFVANEVIRHGADVDFDALVIGRVGN
HEALALVGLLSGKVAGFAAAGLFQGVFGWEGVLDCLLNARDASQSIGVAL

>aaRXN03146 TRANSLATE of: rxn03146.seq check: 6973 from: 1 to: 471
MNPRIIMLLRIIFGAFLALLVLQVLLAIKIVRDGLNSGELSPLTILASFVIIGFGLV
QFIIVCLFALLRLVEDDEIFDAHSLAWVDRIATITAAAGAVLLLPMAIYVAEVDAPGAIV
FGLILAMLITGVSLLVKIMRALLARAIGFSTELESVI

>aaRXN03147 TRANSLATE of: rxn03147.seq check: 6179 from: 1 to: 252
LEILFKSGLGFVVIIGAVGEYFGADFCGAGAGGGGLLKLAEYIAGWIAGESADDVFGFVV
CVLRFETFLGVGVCQRGIVWEEHG

>aaRXN03149 TRANSLATE of: rxn03149.seq check: 777 from: 1 to: 267
VVIGELLPKSYSIVNTEKVVLFVVKPLHYFYKVMFPFIWVLNHSAAAGLGKLLGVRLVSEG
EETLSQEELTLVALNSYEKGELPKKNIII

>aaRXN03152 TRANSLATE of: rxn03152.seq check: 1285 from: 1 to: 273
MKLFSRTPPLVALGTAAAMAATSISVPAQAEVAPAQVVYVADTVEEETGSSNGSSDIDSD
TILDYVVVITGIVGVLSAGLTFATAFQRSIQ

>aaRXN03153 TRANSLATE of: rxn03153.seq check: 7794 from: 1 to: 564
MRRIWLLVCGIALTVAGCTSGSTPTTPTTVTVTATPTSEEAASPTNDILASQFHPCEVLT
QEQFEEVGLGVLIVEDAYLGSTGLGCSFGKADREDFSGTWLISTDQANRQFVENQDLETL
DWGSNDNPDLYVHQMSSETGRQCEAAVDYDWGRLTVDYELGEGWEPEILCSDAVEILENL
IKELRGIP

>aaRXN03154 TRANSLATE of: rxn03154.seq check: 5495 from: 1 to: 912
MLKTTLLITDTLGHVSTSTEPTTTAHVPLPDGSSTPVQI WASDNKDSQLVMLWPGFGMGYY
YRPLAAALNKAGFHVAIAGELRGQGQSSAKASRKSQWGYHDLASVDPLQIAAAKKALDLE
EGHPMRFLSHSMGGQISCLFAARPEAEKYNLRAIFGVGAGSPFRPTFS PKMGKRLGLGAV
LLGGIGGHIVGFWPVKVLGKDLVGYGRQSGTHMREWRRFHKHNSLDDLTAQDINYEVMK
KVSIPITFSRCPDDEDCPQASIDGLASFVPAQIKMIEIPEALGHNWAREPESTVKLFL
EQAL

>aaRXN03156 TRANSLATE of: rxn03156.seq check: 5548 from: 1 to: 180
MARTTPPPADVLDIIISTVKQTIGIDLAEIQGRALGQAQGEAQGKASAAALEQAPHNEQ

>aaRXN03162 TRANSLATE of: rxn03162.seq check: 7855 from: 1 to: 396
VHDEHWVWSDKEDADFADFDDAWHETHINEHAVVADDVLVTEIHELAEADFVSVVDCFGA
LDFSVQWQCGAWLDGCSQFLVYQLDAPNAGAGGATVLLLEHALTEGQGGWENLVEGLHVVV
RLGVGWHQVGLG

>aaRXN03167 TRANSLATE of: rxn03167.seq check: 749 from: 1 to: 630
MNTNLPNLYTAFDLDRSESSEALGVLSARDLRLEQMGIQDDPRRAQTVQAFVADPA
KRATYDAQLEAGVPLTWAQIQHLGNFGTLPSTPTAQPFAPQPEPSPEPQQQWNSGQNYA
YGNPTMDYQTQQSYNPMQDQTQASMYAQPFANTPAPMYNSNQVFNRPTAGTRLWMAILDS
IFAGIAGGIVSGIFGFGSEFLT SVIMILVL

>aaRXN03170 TRANSLATE of: rxn03170.seq check: 4430 from: 1 to: 249
LPHAKELAEHLCLLPAPVLPALPTDSGAQFDIHQALSASLATYARNLTLLSHTAENLGNR
ALTGLAEIEDTDDQLAHALERLT

>aaRXN03172 TRANSLATE of: rxn03172.seq check: 3870 from: 1 to: 1026
PEWKKFNSGDAARVVPDANAELDIIGAPALLADRPSYANVKTL SRIFAVMRS LGHVTAAS
PVTVFSSHSVLSNVDRGSEHYSGPNGLGEWTSVGRAVATNWNQVVDALDEAITVKEVNS
LFTEDAATRIQEAQAQVQAAREAEQIAKEEAKEVDYPYDNPWAAAGIDPIKVSIDGRTI
YTLRTYLGQPVFLGKFGEISTFNSQKSLLRWLVEHDDHDLARASTWSDLMLGINAGETE
LLVHSDNVYSFNGLVKDINTSVDAVDTQQMARAYELMADTADWADDDSMNSYFLANPRMQ
DYISYMLGGS DTSYGYPHAPFNDHSESWRELEEMLIKRF SKF

>aaRXN03173 TRANSLATE of: rxn03173.seq check: 9151 from: 1 to: 1098
 LNRDTHHLWVVLTTDSDDFDADSFTEVIRITGYSRHEVNNGLNAMAAMTNLPHLRAIQE
 RYYFLSIRYLASIMIAVAKADPTLWEELDLRITDALTPVTAGEVMIQSSTLSKRIAAWIK
 ELDPEPTPEPTPKEDYVHVHTTDEATYVRIKISGPNRLILNDIITQLKDTDTEDSLPEAL
 MAFLTEKIQLKITKYLFTPHKHPEQVWSPDYGDIDPEAYANATLVCAKDLDELAGEATEKS
 YTPSEKMKALIRARDGHCRCFPGCCVPASKCQVDHIIPWAEAGGPTAAWNQLLCQRHHNMK
 TDGRFTADANGLAEIRWIGPMDVPAVTRPTGPLEVKAMPRIWGWQLRDRIQARFERIRDR
 ALNKED

>aaRXN03174 TRANSLATE of: rxn03174.seq check: 9763 from: 1 to: 456
 MLLTILWAIGITAEGMTGALAAGRQKMDLFGVSVIACVTAIGGGSIRDMLLGHYPLVWVE
 KPLYLLLIIGAAILTVSISIFLMEHFRVLFVLDAVGLSAFAVIGTQIALEMGYGFIIAVV
 ASVLTGVFGGVMRDLLCDRIPLVFQKELYASI

>aaRXN03177 TRANSLATE of: rxn03177.seq check: 4510 from: 1 to: 666
 VKKKLMLPLIVAALGLSACSSEPAAAPLEAEPLHNLIDGSEGLDNATEGNDTSLSGQP
 INLTVVNGALDIDGSCGKALQAVEDVNLDVSVASASRALASGDKQVGIAMYSTAEDNDISP
 MDLYADIANACEDPVVDSSDTTYTFGKLDDAPDGAVGFTLDIEVTPDNQGSTVMMIQELG
 NHHIIVAGLETTPEETATVFEAQRTKLEEGQLKQNWQLGWV

>aaRXN03182 TRANSLATE of: rxn03182.seq check: 2985 from: 1 to: 273
 MTLQLFTDIVSLVFILSGAFLSFSASIGLIRFKDTMSRVHAMTKPQTTGLILTVVGAIIR
 ILGHEHFDQSQRSDLGVLVLLVLFALLTSPV

>aaRXN03184 TRANSLATE of: rxn03184.seq check: 3926 from: 1 to: 498
 MVGAFGGGVLGGYIPGTILMIAFALMMIATSTAMLRGRKQKKGASKSSLWRVLVDGLVVG
 AVTGLVGAGGGFLVVPALALLGGLSMPVAVGTSLVVITMKSFAGLAGYLTQVLDWGLVL
 MVTAAAIVGSLAGSRLAGRPETLLRKGFVFLVMGVFVLGLELL

>aaRXN03185 TRANSLATE of: rxn03185.seq check: 4886 from: 1 to: 189
 MNDLAAEGENDPYRMVQQLRRKLSRFVEQKWKRPVIMPTVIPMTAETHIGDDEVSRASR
 ESL